

28463

RBB  
695



THE ROYAL SOCIETY  
for the Promotion  
OF HEALTH  
LIBRARY

DEPARTMENT OF  
NATIONAL HEALTH AND WELFARE

# ANNUAL REPORT

FOR THE FISCAL YEAR ENDED MARCH 31, 1963

RBB/695



22501400249



CANADA

THE DEPARTMENT OF  
NATIONAL HEALTH AND WELFARE

# ANNUAL REPORT

FOR THE FISCAL YEAR  
ENDED MARCH 31

1963

Roger Duhamel, F.R.S.C.  
Queen's Printer and Controller of Stationery  
Ottawa, 1963



© Crown Copyrights reserved

Available by mail from the Queen's Printer, Ottawa,  
and the following Canadian Government bookshops:

**OTTAWA**

*Daly Building, Corner Mackenzie and Rideau*

**TORONTO**

*Mackenzie Building, 36 Adelaide St. East*

**MONTREAL**

*Aeterna-Vie Building, 1182 St. Catherine St. West*

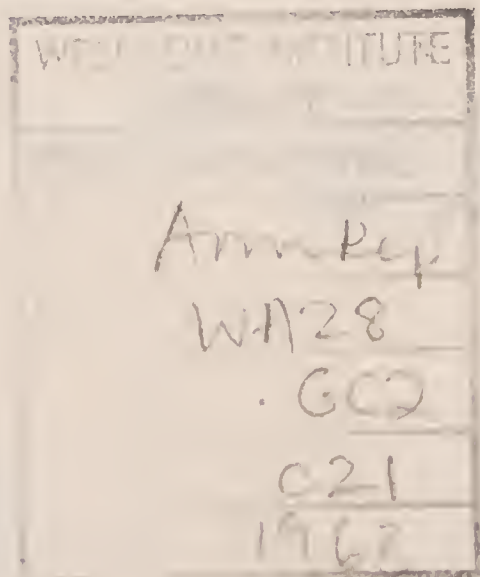
or through your bookseller

A deposit copy of this publication is also available  
for reference in public libraries across Canada

Price 75 cents    Catalogue No. H1-3/1963

*Price subject to change without notice*

Roger DUHAMEL, F.R.S.C.  
Queen's Printer and Controller of Stationery  
Ottawa, Canada  
1963





*His Excellency Major-General Georges P. Vanier, D.S.O., M.C., C.D.,  
Governor General and Commander-in-Chief of Canada.*


MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of National Health and Welfare for the fiscal year ended March 31, 1963.

Respectfully submitted,

JUDY LaMARSH

*Minister of National Health and Welfare*



Digitized by the Internet Archive  
in 2019 with funding from  
Wellcome Library

<https://archive.org/details/b3140814x>

# CONTENTS

## Health Branch

	<i>Page</i>
<i>Food and Drug</i> .....	11
Narcotic Control.....	18
<i>Health Services</i> .....	24
Introduction.....	24
Health Insurance.....	25
International Health.....	28
National Health Grants.....	30
Research Development.....	32
Special Health Services.....	37
Chief Nursing Consultant.....	37
Child and Maternal Health.....	37
Dental Health.....	41
Emergency Health.....	42
Epidemiology.....	45
Hospital Design.....	47
Laboratory of Hygiene.....	49
Medical Rehabilitation.....	56
Blindness Control .....	59
Mental Health.....	61
Nutrition.....	63
Occupational Health.....	67
Public Health Engineering.....	70
Radiation Protection.....	76
<i>Medical Services</i> .....	79
Indian and Northern Health Services.....	79
Civil Aviation Medicine.....	81
Civil Service Health.....	83
Quarantine Service .....	90
Leprosy.....	96
Immigration Medical Services.....	96
Sick Mariners Service.....	103
Dominion Council of Health.....	106

## Welfare Branch

Introduction.....	107
International Welfare.....	108
Welfare Grants.....	110
Family Allowances.....	113
Old Age Security.....	114
Old Age Assistance.....	119



	<i>Page</i>
Allowance for Blind Persons.....	119
Allowance for Disabled Persons.....	120
Unemployment Assistance.....	122
Emergency Welfare Services.....	125
Fitness and Amateur Sport Services.....	126
Civil Defence Training.....	131

### **Administration Branch**

Departmental Secretary.....	132
Information Services.....	133
Legal.....	136
Departmental Library.....	136
Personnel Administration and Organization.....	137
Purchasing and Supply.....	142
Research and Statistics.....	143
Directory of Departmental Officers.....	149
Directory of Departmental Establishments.....	152

## INDEX OF TABLES

<i>Table</i>	<i>Page</i>
1 Imports of Controlled Drugs.....	20
2 Convictions Under the Opium and Narcotic Drug Act and the Narcotic Control Act.....	21
3 Imports of Main Narcotics.....	22
4 Estimated Consumption of the Main Narcotics.....	23
5 Payments by Canada Under Hospital Insurance and Diagnostic Services Act	27
6 Expenditures Under the National Health Grants.....	31
7 Summary of Intramural Research Program.....	33
8 Allocations for Research Under the National Health Grants Program.....	34
9 Distribution of Research Under the National Health Grants.....	35
10 Distribution of Research Under National Health Grants According to Disease Groups.....	36
11 Expenditure of National Health Grants.....	41
12 Hospital Construction Grant Approvals.....	49
13 Medical Rehabilitation and Crippled Children Grant Analyses 1953-1963.....	58
14 Blindness Treatment Cases.....	60
15 Distribution of Treatment Cases.....	60
16 Nutrition Laboratory Services — Sera.....	66
17 Nutrition Laboratory Services — Urine.....	66
18 Statistical Summary of Field Work (Public Health Engineering).....	76
19 Medical Services Facilities.....	80
20 Medical Centre Statistics.....	86
21 Retirements from Service — According to Disability.....	87
22 Ottawa Health Unit Locations.....	88
23 Regional Health Unit Locations.....	88
24 Health Unit Statistics.....	89
25 Ships Inspected — Unorganized Ports.....	93
26 Inspection of Aircraft Subject to Quarantine.....	94
27 Ships Boarded by Quarantine Officers, Organized Quarantine Stations .....	95
28 Control of Rodents on Vessels.....	95
29 Immigration Medical Service, Summary of Activities.....	98
30 Details of Examinations (Overseas).....	99
31 Immigration Medical Examinations and Inspections in Canada.....	100
32 Certifications Under Section 5 of the Immigration Act.....	101
33 Cases Prescreened at Ottawa Showing Country of Origin.....	102

<i>Table</i>	<i>Page</i>
34 Sick Mariners Service .....	103
35 Diseases and Injuries Treated.....	105
36 National Welfare Grants Payments .....	112
37 Family Allowance Payments March 1962 and March 1963.....	116
38 Net Family Allowance Payments — Comparison by Fiscal Years.....	117
39 Old Age Security Statistics.....	118
40 Federal Payments Towards Assistance to the Aged, Blind and Disabled .....	121
41 Federal Unemployment Assistance Payments to Provinces.....	123
42 Federal Share of Unemployment Assistance.....	124
43 Fitness Grants, Summary of Expenditures.....	127
44 Fitness Grants to National Organizations.....	128
45 Summary of Fitness Awards.....	130
46 Summary of Post-Graduate Scholarships and Fellowships.....	130
47 Staff Situation with Special References to Professional Classes.....	139
48 Geographical Distribution of Established Full-time Positions.....	140
49 Establishment by Division.....	141



To the Honourable Judy LaMarsh,  
*Minister of National Health and Welfare, Ottawa.*

MADAM:

In submitting this annual report of the department's activities for the fiscal year 1962-63, we take note of the fact that the period under review was prior to your assumption of responsibility.

We take pleasure in noting the department's increased contributions in international health and welfare matters. Officers of the department have represented Canada on a number of occasions at meetings of United Nations agencies and commissions and the department has taken an active part in assisting the health and welfare aspects of the various programs for assistance to developing countries.

The newly-established welfare grants program has commenced auspiciously and has been enthusiastically welcomed.

Health grants, steadily increasing over the years, reached a total of approximately \$50,500,000 in 1962-63, with about \$30,500,000 for general health grants and the balance of \$20,000,000 for hospital construction.

The amalgamation of four divisions into the directorate of Medical Services has proved to be a fortuitous joining of allied staffs. The Civil Service Health Division, Civil Aviation Medicine Division, Indian and Northern Health Services and the Quarantine, Immigration Medical and Sick Mariners Services are working smoothly and efficiently together.

The Fitness and Amateur Sport Program is steadily moving forward. Grants to national organizations, to the provinces and to research institutions, the fellowship, scholarship, bursary program and a technical information program are all commencing to make a contribution to fitness and amateur sport in Canada.

Increased expenditures of the department to \$1,857,802,315 in 1962-1963 from \$1,665,383,499 in 1961-62 are largely accounted for by increased rates of social security payments.

We feel this letter of transmittal would be incomplete without a reference to the loyal and devoted service of the staff of the department during the year under review.

Respectfully submitted,

G. D. W. CAMERON,  
*Deputy Minister of National  
Health and Welfare (Health)*

JOSEPH W. WILLARD,  
*Deputy Minister of National  
Health and Welfare (Welfare)*

Ottawa, Canada





# HEALTH BRANCH

## FOOD AND DRUG

An amendment to the Food and Drugs Act provided for the prohibition of the sale of certain specified drugs to be listed under Schedule H. Two drugs initially listed are thalidomide and lysergic acid diethylamide. Following enactment of this legislation, representation was made to the Food and Drug Directorate to exempt lysergic acid diethylamide from total prohibition and allow limited distribution. This was accomplished by drafting regulations under the Food and Drugs Act providing for limitation of sale and distribution of the drug to institutions with facilities and clinical experts to continue research on the use of this drug. New regulations were passed requiring that all egg products be free from Salmonella. An extensive examination of cake mixes for the presence of Salmonella was carried out, and any products found to contain these bacteria were removed from the market.

Considerable time was spent in drafting regulations concerned with prescribing conditions for distribution of drug samples to physicians, veterinarians, dentists and pharmacists. Also, drafting of revised regulations on new drugs was begun following recommendations of the report from the Committee of the Royal College of Physicians and Surgeons.

Program planning was continued and regional offices were provided with an estimate of the time to be expended on various commodities and activities concerned with domestic products. In addition, a project was initiated to obtain an estimate of the workload for surveillance of import shipments of products coming within the jurisdiction of the Food and Drugs Act.

The Biometrics Section, which provides services and consultation with relation to the statistical problems of the directorate, undertook a survey to determine weight variation in loaves of bread sold on the market. As a result, recommendations on allowable variations in the weight of individual loaves, and for screening tests to determine whether the average weight of loaves complied with the declared weight, were submitted for use by Inspection and Enforcement Services. Research staff were assisted in the application of statistical methods to their experiments.

A number of national and regional surveys were conducted jointly by headquarters and regional laboratories. These projects included a study of tablet disintegration time, to establish a sound basis for setting up sampling procedures and analytical tolerances, and work on identification of marihuana and on a modified method for determining insects in fig and date paste. Other studies included one on fat determination for cottage cheese and another involving multi-vitamin preparations, designed to serve as a check on uniformity of analyses in regional laboratories.



### **Administrative Services**

The Administrative Services Division again provided the complex ancillary services required by a scientific enforcement agency. Major emphasis was placed on preparing plans for facilities (spare equipment, chemicals and other services) which will be needed by the greatly enlarged staff of the directorate in 1963-64. The increased activities reported by the other divisions of the directorate resulted in heavier demands on Administrative Services. This is reflected by the large increase in such items as Trade Information Letters published, and radio and T.V. scripts recorded and routed. These scripts are submitted for review to the Food and Drug Directorate as required by the regulations of the Board of Broadcast Governors.

### **Consumer Relations**

A survey of the effect on the public of advertising alluding to polyunsaturates and cholesterol was conducted across Canada. This was carried out in two phases: by telephone, using an impartially-selected list of household numbers, and by mail, to members of consumer organizations. The results will serve to guide the directorate in its policy on advertising. Other work of the section included speaking engagements, dealing with consumer complaints and enquiries, preparing material for articles in consumer publications and attending exhibitions, conventions and consumer and educational gatherings.

### **Medical Services**

One hundred and seventy-six new drug submissions were received from pharmaceutical manufacturers and 110 submissions were carried over from the previous year; notices of compliance with the regulations were issued for 107 new drug submissions, seven were withdrawn by the manufacturer, 38 submissions were declared inactive and 134 were carried over for further review.

Most new chemical entities were either added to the prescription list or were already included because of their classification in one of the broad categories in Schedule F of the act. The staff were affected by the great increase in the work of advisory committees, having been concerned with a number of meetings of the Canadian Drug Advisory Committee, the Subcommittee on New Drugs appointed by the Royal College of Physicians and Surgeons and the Parliamentary Committee on Foods and Drugs. Press reports concerning adverse reactions to drugs were investigated. While a number of these were substantiated, others were garbled or completely unfounded.

The Poison Control Program expanded to 220 Poison Control Centres, giving 24-hour service. The Poison Control Unit of the Medical Section acts as a clearing-house in disseminating to the centres toxicological information on pre-packaged consumer products (drugs and household chemicals) along with suggested treatment in cases of accidental ingestion. Contacts with similar agencies in other countries have been made and will be encouraged more frequently in the future, as they serve a useful purpose in gaining new knowledge of toxicology. The Poison Control Centres service the public as treatment centres, as poison information



centres for parents, doctors, pharmacists, other hospitals and the trade, and as poison prevention agencies through their educational activities which enlist the co-operation of public health nurses.

### **Protecting the Supply of Foods and Drugs**

A priority interest in the area of food protection was the examination for Salmonella of egg products and foods containing egg products.

Because of tragic side effects of a drug hitherto unsuspected, a number of long-established drugs were investigated.

In keeping with a new policy, all manufacturers wishing to tender on government contracts for the supply of drugs were required to first have their plants inspected by Food and Drug inspectors.

Thirty-eight hundred manufacturing establishments were inspected; 32,000 samples of domestic and imported foods or drugs were examined; nearly 90,000 labels and advertisements and about 33,000 radio and television commercials were reviewed. Headquarters recorded some 450 interviews with the trade.

Applications for registration of new products under the Proprietary or Patent Medicine Act numbered 273 of which 133 were refused. Licences were issued to 935 manufacturers. The official register included 3,047 preparations at the end of the year.

### **Legal Action**

Ninety-three prosecutions involving foods and drugs were completed. The emphasis was on foods, a total of 81 cases having been heard with fines assessed amounting to \$13,950. The number of drug stores involved in illegal sale of prescription drugs decreased by more than half. There were only 12 prosecutions with fines amounting to \$1,600. Five convictions involving the sale of horsemeat without label declaration brought fines totalling \$4,200. Prosecutions for the sale of meat from dead and fallen animals for human consumption resulted in heavy fines and jail sentences being imposed on a number of offenders. Two hundred and thirty-one seizures of foods and drugs valued at more than \$85,000 were made. Products which could not be reconditioned were destroyed.

### **Investigation and Research**

The scientific services of the directorate consist of the central laboratory in Ottawa and five regional laboratories in Halifax, Montreal, Toronto, Winnipeg and Vancouver. The central laboratory is responsible for carrying out basic research on foods and drugs and development of analytical procedures for enforcement purposes while regional laboratories concentrate on examination, for regulatory purposes, of all products which come under the act, and also carry out investigational work on methods of analysis. During the past year, work in these laboratories has resulted in about 75 publications in scientific literature.

The eleven sections in the central laboratory embrace various aspects of the biological, chemical and physical sciences, and each is headed by an expert in



his particular field. A number of these scientists have participated in the work of international groups and of the United Nations. These projects involved a continuation of studies already under way, such as the nutritive properties of fish flour, protein evaluation, the composition of essential oils and the detection and determination of narcotics. Members of the directorate were appointed as referees or associate referees for the Association of Official Agricultural Chemists, an organization devoted to the development of analytical procedures for regulatory purposes.

Scientists from Canada and abroad received training or conducted specialized research at the Food and Drug laboratories. Three National Research Council post-doctorate fellows carried out their studies in the central laboratory, two working in nutrition and the third in pharmacology. Two scientists received instruction in the analysis of pesticide residues in food products. Four pharmaceutical chemists, two from Brazil, one from Sweden and one from India, visited the laboratory for consultation and training in the analysis of pharmaceutical preparations.

A scientific advisory unit was established in the central laboratory, to provide technical advice on pesticides, food additives, medicated feeds, packing materials and other matters of a scientific nature. This unit also acts in an advisory capacity to other governmental agencies on matters relating to the responsibilities of the directorate under the Food and Drugs Act. In the past year, the section processed 69 pesticide submissions and procured and collated the data for establishment of a list of acceptable food additives.

### **Animal Colony**

A large animal breeding colony is maintained in modern, air-conditioned quarters to supply experimental animals for investigations on possible toxicity and other properties of foods, drugs and comestics. Some 31,000 rats and 9,500 mice were used in these studies as well as a similar number of other animals including guinea pigs, monkeys, rabbits, chickens and pigeons.

### **Animal Pathology**

Studies were continued on anemia and gastric lesions in animals fed cholesterol and dietary fats. Kidney function tests for use in laboratory animals were elaborated. They are designed for examination of the small quantities of urine obtainable from rats, and are to be used in various toxicity studies. Tissues were studied from animals that had been used in toxicity tests of a variety of drugs and food additives. The manner of housing rats, it was found, had a pronounced effect on their behaviour. Individually caged animals were excitable and intractable, whereas community caged animals were docile and easily handled. Housing also affected the blood picture and various organ weights. Studies relating the age of the animal and the time taken for tumors to develop after dosing were undertaken with a view to shortening the time required for chronic toxicity studies.



## Biophysics

The survey of residual radioactivity in Canadian foods has been continued. Strontium-90 determinations have been completed on about 115 samples of foods, both Canadian and imported. Total beta radioactivity is being measured on another 200 samples including sea foods of Canadian and Japanese origin, tea, cereals, fresh fruits and vegetables.

## Cosmetics and Food Colours

Studies of butter and margarine colours containing annatto were continued. The yellow pigment of heat-treated annatto colours was isolated and characterized as a thermal degradation product of bixin, the chief pigment of annatto seeds. Gas chromatography has shown promise as a means for differentiating between different types of whisky. Determinations on trace constituents in Scotch and Canadian whiskies have shown significant qualitative and quantitative differences. Studies of methods for determining potentially harmful ingredients in cosmetic products were continued.

## Food Chemistry

A scheme of analysis developed in this section will allow the regional laboratories to determine more than twenty organophosphate pesticides simultaneously at very low levels. A procedure is being developed for isolation and simultaneous determination of most of the commonly used chlorinated pesticides from animal fats and milk. A clean-up procedure developed last year for isolation of trace quantities of chlorinated pesticides from plant extracts has now been applied to many biological extracts and makes possible simultaneous determination of eight of the most commonly used chlorinated pesticides. Further electrophoretic studies of enzyme-organophosphorous pesticide reactions opened up a whole new area for method development. Studies were continued on the isolation of metabolites and toxic degradation products of organophosphorous pesticides from plots of lettuce with a known spray history.

Vanilla extracts on the Canadian market have been examined and new paper chromatographic methods have been developed for detection of foreign substances and substitutions. Further work has been done on detection of insect infestation of foods by using microscopic and chemical methods. Means of determining the water content of cured pork products were studied and consideration was given to methods of determining added water in such products. A critical study of two procedures for the determination of piperine in black and white pepper was carried out, and work was continued on detection of foreign fats in butter and meat products, and on the effect of heat on fats and oils.

## Microbiology

The theory that alpha hemolysin, produced by some strains of *Staphylococcus aureus*, is a specific proteolytic enzyme was discredited by the isolation of com-



ponents of the hemolysin which are independently hemolytic and proteolytic. Irradiation work on bacteria was continued. Strains of bacteria which had built up radiation resistance showed a decrease in resistance to antibiotics; *Salmonellae* also showed a decrease in virulence, though in no case was virulence completely destroyed. Only minor serological changes were noted in radiation-resistant *Salmonellae*. Genetical studies were begun of bacterial mutants to gamma radiation resistance. Further studies were made on the nuclei of certain strains of bacteria resistant to gamma radiation, using biochemical techniques.

### **Organic Chemistry and Narcotics**

Essential oils containing volatile organic chemicals are widely used to perfume and flavour cosmetics, drugs and foods. Among the more expensive essences are peppermint, spearmint, vetiver and rosewood, extracted from plants grown in different parts of the world. Substitution of cheaper organic chemicals besides being fraudulent may also constitute a hazard to health. To detect such fraud, methods of assay of essential oils are being studied with the use of the latest scientific instruments. Heroin samples seized by the R.C.M.P. from traffickers and addicts in Vancouver, Edmonton, Toronto and Montreal were assayed to find the street level dosage used by addicts in these cities. Opium, the natural source of heroin, was investigated and a rapid, simultaneous method was produced for detecting morphine, codeine and porphyroxine. Marihuana identification methods were developed for study by regional laboratories of the directorate. Many new synthetic organic chemicals with pain-relieving and sleep-producing properties have been developed. As in the case of heroin, these drugs can cause addiction, and new methods of analysis were developed to help in the control of their possible abuse.

### **Pharmaceutical Chemistry**

Studies were completed on isolation and identification of breakdown products of various barbiturates. A collaborative study on tablet disintegration was carried out in co-operation with regional laboratories. New regulations on tablets which resist gastric juice but dissolve in intestinal juice were promulgated and, in conjunction with this, the revised method for determination of disintegration time of tablets was checked and distributed. As part of a continuing program, studies were carried out on identification of a number of substances listed in Schedule F of the Food and Drugs Act. A number of tranquilizers, hypnotics and ergot alkaloids were included in this project. Further investigations were carried out on simultaneous analysis of the components in pharmaceuticals containing two or more active ingredients. Combinations such as butabarbital and hydrochlorothiazide, mephenesin and salicylamide, and p-aminobenzoic acid and salicylamide were studied. Attempts were made to set up a satisfactory method for evaluating antacids and methods of analysis for atropine sulfate were investigated. Paper chromatographic techniques for isolation and identification of phosphates in certain antibiotics were studied. A number of ophthalmic ointments were examined for the presence of metallic particles. A market survey was carried out on phar-



maceuticals containing tolbutamide. Work has been initiated on development of techniques for measurement of drug release from solids.

### **Pharmacology and Toxicology**

The assay method developed in this laboratory for cholinesterase inhibitors was used to determine the toxicity of pure pesticides and the levels of those pesticides in extracts of foods. The usefulness of animal tests to predict teratogenic action of drugs in humans is being investigated. The relative biological activity of different preparations of tolbutamide is being studied. In a study of two cancer-producing agents, no clear-cut differences were detected in the number of tumours in rats fed a high-fat diet and those on a low-fat diet. External application of two permitted food colours, Guinea Green B and Benzyl Violet 4B over a two-year period failed to produce gross skin tumours in rats. Cancer-producing action of two anti-thyroid compounds aminotriazole and thiourea, alone or in combination with known cancer agents, was studied in rats. Seizure was made of two batches of digitalis leaf tablets when their strength was found to be significantly different from that stated on the label. Experiments in rats showed that alcohol increased the effects of barbiturates by synergistic action, rather than by prolonging their toxic effects.

### **Physiology and Hormones**

Investigation of the biological activity of thyroid hormones was continued, as methods of assay for thyroid now in use do not give a satisfactory estimate of its biological effectiveness. To this end, the amount of the active hormones thyroxine and liothyronine were measured in thyroid preparations obtained from a wide variety of sources; and a contaminant-free thyroglobulin preparation was obtained from a saline extract of beef thyroid glands, using a method which separates proteins according to their molecular size and shape. A procedure for the bioassay of corticotrophin was investigated and work continued on identification and quantitative estimation of estrogenic and adrenocortical steroids by means of colorimetric, spectrophotometric, fluorometric and chromatographic techniques.

### **Vitamins and Nutrition**

Changes in plasma-amino acid levels in human volunteers fed normal foods were used to detect differences in the nutritional value of proteins. Equations were developed by means of which it was possible to predict the protein value of a diet from its amino acid composition without the need for time-consuming biological assays. Studies with fish protein concentrate, a potentially valuable protein source, indicated that solvent extraction during processing may reduce the availability of amino acids. The effects of dietary fats on quantitative changes in body fatty acids were investigated. The amount of linoleic acid deposited in the body was dependent on the amount in the diet and the length of time during which it was fed. The nature of the diet was found to influence significantly



the intestinal microflora of the rat. New chemical methods were developed for determination of two forms of Vitamin B<sub>6</sub>, pyridoxine and pyridoxamine, in foods. A chemical procedure for determination of calcium pantothenate in complex pharmaceutical products was found to be equally applicable to the sodium salt of pantothenic acid. A survey of multi-vitamin products on the Canadian market indicated that a substantial portion contained derivatives of vitamin A which have almost no biological activity. Serum levels after administration to human subjects of sustained release iron preparations indicated that none of the products tested possessed true sustained release characteristics.

## **NARCOTIC CONTROL**

The division continued to maintain the required control over narcotic and controlled drugs, at the same time endeavouring not to interfere with the orderly distribution of such supplies for medical purposes. In addition, by means of control and education, the prevention of addiction was dealt with at every possible opportunity.

This was the division's first complete year in the administration of Part III of the Food and Drugs Act relative to the control of barbiturates and amphetamines. Experience gained revealed that the controls established were necessary and in the public interest. Abuse of these drugs is much more prevalent than was generally known or expected.

### **Licensed Dealers**

During the calendar year 171 firms were licensed to deal in narcotics, and 300 in controlled drugs. Of these, almost one-half acted solely as distributors. The others were authorized to manufacture pharmaceutical specialties containing narcotic and controlled drugs.

### **Retail Pharmacies**

The division's policy of obtaining narcotic and controlled drug sales reports from all retail pharmacies in Canada at regular intervals continued. With the advent of controlled drug legislation there has been a marked increase in correspondence with physicians and pharmacists as a result of screening these reports. On the whole, our inquiries have been well received and many favourable comments have been forthcoming from members of both the medical and pharmaceutical professions as to the necessity for controlled drug regulations.

### **Addiction**

Canada's known narcotic addict population in 1962 was 3,576. These addicts, for statistical purposes, were divided into three classes: criminal, 3,136; medical, 306; professional, 134. There has been no marked trend either towards



increase or decrease in the over-all numbers of addicts in Canada for the past five years. The figures covering this period are as follows:

1957 — 3,315	1960 — 3,295
1958 — 3,412	1961 — 3,395
1959 — 3,408	1962 — 3,576

### **Consumption Statistics**

Details of imports and consumption of narcotics are set forth on subsequent charts.

Due to the fact that we have no basic records on which to establish consumption of controlled drugs these figures are not available. However, a table is included indicating the quantities of controlled drugs imported during the year under review.

### **Convictions**

Our addict population continued to obtain their supplies of heroin from material smuggled into the country by well organized criminal groups. There was no major diversion of narcotic drugs from licit channels.

There were 331 convictions under the Narcotic Control Act in 1962.

Of these, 248 were for illegal possession of narcotics, 61 for trafficking in narcotics, 21 for possession of narcotics for the purpose of trafficking and one for the illegal importation of narcotics.

In respect to Controlled Drugs there were 39 convictions under Part III of the Food and Drugs Act. Of these, 29 were for trafficking and 10 for possession for the purpose of trafficking. An offence has not been created for possession of controlled drugs, other than for the purpose of trafficking.

Unlike narcotics the controlled drugs found in the illicit market originated from material manufactured for medicinal purposes and which had been diverted from legal sources. There were a number of thefts from both wholesale and retail outlets and certain individuals who were convicted of trafficking in controlled drugs obtained the material by means of prescriptions.

### **Co-operation by Enforcement Agencies**

Our liaison with the R.C.M.P. and other law agencies continues on a very satisfactory level. It is felt that the drop in the over-all number of convictions this year is largely due to increased surveillance on their part. This activity undoubtedly also is represented in the fact that while the population of our country is consistently growing our number of known addicts remains about the same.

### **Liaison with Medical, Pharmaceutical and Related Professions**

The division continued to maintain close contact with the provincial registrars of the medical, pharmaceutical and related professions.

Lectures were given to graduating classes in medical schools, pharmaceutical faculties at universities and schools of nursing in hospitals.

Legislation permitting the exchange of information between the department and provincial licensing bodies was utilized on several occasions to adjust violations of the regulations which had come to our attention.

**Inspectional Work**

At the close of 1962 the division had in the field 15 inspectors. There were 7,277 audits, inspections and special interviews carried out.

**International Co-Operation**

All required reports of information were submitted to interested sections of the United Nations, and our liaison with narcotic authorities in other countries proved beneficial and effective.

TABLE 1  
IMPORTS OF CONTROLLED DRUGS DURING THE CALENDAR YEAR 1962

Class of Drugs	Straight Drug Kg.	Preparations Kg.	Total
Amphetamine and its Salts.....	285.282	86.398	371.680
Barbituric Acid and its Salts and Derivatives.....	25488.416	953.768	26442.184
Benzphetamine and its Salts.....			
Methamphetamine and its Salts.....	53.030	0.303	53.333



TABLE 2  
CONVICTIONS UNDER THE OPIUM AND NARCOTIC DRUG ACT  
AND THE NARCOTIC CONTROL ACT DURING THE CALENDAR YEAR 1962.

Province	4 (1)	4 (3) (a)	4 (3) (b)	3 (1)	4 (1)	4 (2)	5 (1)	Total	Heroin	Mor- phine	Mari- huana	Pethi- dine	Codeine	Poppy Heads	Propo- xyphene	Total
Nfld.....				2				2			2					2
P.E.I.....																
N.S.....					1			1			1					1
N.B.....																
Que.....				12	1	1		14	6	1	4	3				14
Ont.....	1	3		65	10	12		91	77	1	5	5	3			91
Man.....				2				2	2							2
Sask.....																
Alta.....				13		3		16	6	6	1		2	1		16
B.C.....	1	1	3	152	45	2	1	205	195	3	2		3	1	1	205
Total.....	2	4	3	246	57	18	1	331	286	11	15	8	8	2	1	331

Of the above there were 20 males and 5 females in British Columbia, as well as one male and one female in Ontario, with two convictions.

Opium and Narcotic Drug Act — Section 4 (1) — Possession  
4 (3) (a) — Trafficking  
4 (3) (b) — Possession for the purpose of trafficking.

Narcotic Control Act — Section 3 (1) — Possession  
4 (1) — Trafficking  
4 (2) — Possession for the purpose of trafficking.

TABLE 3  
IMPORTS OF MAIN NARCOTICS FOR PERIOD 1953-1962 INCLUSIVE  
Unit of Weight — Kilogramme (Pure)

Year	Raw Opium	Medicinal Opium and Preps.	Morphine	Hydro- codone	Hydro- morphine	Ethyl- morphine	Codeine	Phol- codine	Cocaine	Alpha- prodine	Levor- phanol	Metha- done	Pethidine
1953.....	49.442	106.823	78.246	5.018	0.368	31.411	1153.335	0.595	49.612	2.636	0.793	5.897	323.449
1954.....	5.897	149.688	60.499	17.775	0.198	39.378	2814.390	17.775	48.308	1.587	0.587	.....	592.061
1955.....	31.525	149.688	52.192	5.301	0.425	24.182	2396.624	5.698	29.597	6.548	0.567	9.554	430.665
1956.....	17.236	145.350	47.332	13.012	0.471	55.291	1893.242	2.602	32.865	2.464	0.338	3.911	323.104
1957.....	2.000	90.902	30.857	20.013	0.355	19.941	2039.416	3.872	31.536	5.548	0.353	6.489	534.702
1958.....	0.567	108.864	28.342	33.338	0.174	19.978	2445.569	.....	33.474	4.488	0.414	6.788	407.728
1959.....	.....	111.630	35.094	15.282	0.267	21.036	2813.256	3.580	19.482	5.984	0.370	4.063	546.189**
1960.....	0.284	117.596	44.889	18.588	0.053	14.032	3039.153	.....	31.257	3.344	0.302	3.236	636.846
1961.....	.....	141.977	44.356	27.639	0.328	12.907	2995.255	.....	30.462	3.411	0.320	8.950	666.420
1962.....	2.000*	145.152	40.063	36.814	0.481	26.485	2816.950	1.745	26.486	4.853	0.370	2.696	491.716

\*For scientific research.  
\*\*53.940 Kg. returned to Great Britain, discoloured material.



TABLE 4  
ESTIMATED CONSUMPTION OF THE MAIN NARCOTICS FOR THE PERIOD 1953-1962 INCLUSIVE  
Unit of Weight — Kilogramme (Pure)

Year	Raw Opium	Medicinal Opium and Preps.	Morphine	Heroin	Hydro- morphine	Codeine	Ethyl- morphine	Phol- codine	Cocaine	Alpha- prodine	Levor- phanol	Metha- done	Pethidine
1953.....	21.603	142.771	76.318	23.474	0.595	1508.192	44.850	0.227	40.030	0.822	0.964	8.845	298.015
1954.....	51.568	158.023	70.024	28.123	0.085	1819.701	16.812	5.670	33.198	3.147	0.368	10.858	335.324
1955.....	20.950	112.294	49.329	12.616*	0.425	2286.994	31.780	4.649	35.693	4.111	0.624	5.953	372.434
1956.....	28.306	185.820	50.402	6.158	0.390	1885.903	28.835	6.358	34.507	3.262	0.478	7.530	478.143
1957.....	21.500	112.519	43.348	5.605	0.319	2407.116	30.284	4.270	31.921	5.945	0.413	5.583	333.078
1958.....	3.648	140.819	44.645	2.971	0.245	2501.709	27.966	1.788	30.188	3.634	0.355	6.768	406.990
1959.....	.539	157.120	36.373	0.473	0.270	2571.228	25.825	3.435	31.171	4.977	0.335	5.290	547.115
1960.....	.114	140.551	41.912	0.144	0.206	2675.452	18.485	1.194	30.514	4.262	0.355	3.487	637.941
1961.....	.....	109.906	43.743	0.081	0.155	2800.388	17.137	0.470	29.252	3.931	0.437	5.562	472.076
1962.....	.....	137.739	44.571	0.067	0.194	3334.749	24.154	2.107	31.306	4.233	0.274	3.324	605.168

\* Import of Heroin banned as of 1st January, 1955.



## HEALTH SERVICES

### INTRODUCTION

The establishment of the office of the Director of Health Services was expanded by the addition of (1) an Assistant Director who assists in the general planning and administration of the Health Services program and, in the director's absence, assumes the responsibilities of acting director; (2) a Planning and Evaluation Unit to which has been appointed a consultant with specialized post-graduate training in the appropriate public health sciences and with broad research experience in the health field who makes proposals and recommendations for the initiation, development and co-ordination of public and personal health services in Canada, provides a consultant service to departmental officers with reference especially to problems, priorities, and changing practices, and is concerned with the development of procedures, criteria, and indices for the assessment of the effectiveness and efficiency of health programs and services; (3) a Consultant in Laboratory Services who advises the Director of Health Services on public health and clinical laboratory arrangements, provides a consultant service to the officers concerned with the Hospital Insurance and Diagnostic Services and the National Health Grants programs, as well as to other areas of the department and to other federal departments of government as required, and advises provincial health authorities on the development of laboratory services and the solution of specific problems in this area.

Other changes within the organization of the directorate included; the appointment during the last month of the fiscal year of a Principal Medical Officer, Special Projects, to the position formerly held by the Principal Medical Officer, Environmental Health and Special Projects; and the amalgamation of the former Medical Rehabilitation and Disability Advisory Service Division and the Blindness Control Division to form the new Medical Rehabilitation Division.

The directorate, through the operation of its various sections and divisions, and in co-operation with other units of the department, with other federal agencies, and with the provincial health authorities, continued its efforts to improve the quality and availability of health services throughout Canada. It continued, also, its activities arising from Canada's responsibilities in the international health field, through participation in the programs of such agencies as the World Health Organization, the Food and Agriculture Organization, the Colombo Plan, and the International Joint Commission.

Matters of particular concern included the continuing prevalence of viral hepatitis, the development of programs designed to provide for the care and treatment of children suffering from congenital malformations, the measurement of radioactive fallout from nuclear weapons testing, and emergency health services planning.



## HEALTH INSURANCE

The Health Insurance section continued to carry out administrative responsibilities in relation to the Hospital Insurance and Diagnostic Services Program. There was a substantial increase in the number of requests for consultative and advisory services made available to the provinces and the consultants in hospital accounting, hospital administration and hospital nursing were in continuing demand. Members of the section participated in workshops, conferences and addressed professional and voluntary organizations.

As in previous years, a number of amendments were made in provincial legislation and concomitant amendments made in agreements under the act where relevant. The majority of amendments to agreements related to the listing of hospitals participating in the provincial programs. In addition to inclusion of new hospitals not previously providing insured services, a number of nursing homes providing an acceptable level of care for long-term patients and included in the agreements on a temporary basis, were relisted for another temporary period.

The most important amendments made to the section of the agreement relating to insured services were the out-patient services provided by Quebec. With effect from October 1, 1962 psychiatric day care and night care was made available on an out-patient basis in a number of designated general hospitals and electroshock and insulinshock therapy were also provided on an out-patient basis in the psychiatric department of general hospitals. Commencing November 1, 1962, Quebec also provided as out-patient services, emergency care within 24 hours of an accident, this period being extended in cases where the patient is prevented by circumstances from receiving emergency care within that time. From the same date Quebec commenced to provide minor surgical procedures, as insured out-patient services. Radiological and laboratory examinations, in connection with these procedures including the examination of tissue, together with necessary interpretations, are provided.

Some minor amendments were made in connection with insured out-patient services in New Brunswick.

Discussions concerning an amendment to the Saskatchewan agreement relating to insured out-patient services were proceeding at the end of the fiscal year under review. These will reflect changes in extension of out-patient services now provided under provincial law.

An amendment was made in the Nova Scotia agreement relating to out-of-province benefits made available to residents during a temporary absence from the province. The original limitation of three months in a period of twelve consecutive months, was removed.

The Alberta agreement was also amended to reflect a revision of provincial arrangements for recovery of costs of insured services in cases of third party liability.



There was a complete revision of the part of the agreement pertaining to the Scheme for Administration, in the agreements with New Brunswick and Manitoba. The New Brunswick revision was made to reflect, retroactively to April 1, 1961, changes in provincial administration, consequent on new legislation to which some reference was made in a previous report; New Brunswick had changed its administration by eliminating the commission originally established for the provincial program, and by changing from a premium system of financing to a non-premium system.

The new Manitoba Scheme for Administration reflects the change in that province resulting from establishment of a commission to administer the provincial program. It also included an earlier amendment relating to a hospital pension plan for hospital employees in Manitoba.

At the end of the fiscal year under review amendments to the Prince Edward Island agreement were still pending, consequent to the change from a premium method of financing to a program of universal coverage.

The Advisory Committee on Hospital Insurance and Diagnostic Services held two meetings, on April 9 and 10 and November 5 and 6, 1962. In addition to a fairly long agenda relating to technical problems of interest to provincial and federal authorities and discussions of reports of various bodies related to the committee, part of the first meeting was devoted to a discussion of management efficiency by planning hospital design. Mr. Gordon Friesen of Washington, D.C., addressed the committee and, illustrating his talk with a series of slides, he demonstrated means of effecting economies while providing higher standards in hospitals.

The Subcommittee on Quality of Care, Research and Statistics, held its fourth meeting on February 21 and 22, 1963 at which it dealt primarily with matters referred to it by the parent body. Among the working parties of this subcommittee which met during the year were the working party on operational research which held a meeting on October 23 and 24, 1962 and a working party on laboratory unit values which met September 27 and 28, 1962.

The working party on operational research was established with a view to identifying areas in the hospital field in which operational research was felt to be desirable; outlining methods which might be utilized in making studies; and setting up priorities.

The working party on laboratory unit values held a meeting September 27 and 28, 1962, with a view to formulating recommendations which would lead to adoption of a standard system of laboratory unit values in all provinces. The working party set up a small continuing group under the chairmanship of Dr. M. O. Klotz, chief pathologist at the Ottawa Civic Hospital.

The working parties on Canadian building standards for hospitals and health facilities met on April 2, 3 and 4, 1962. An ad hoc working party established by the Subcommittee on Finance and Accounting to examine a problem related to the revenue of hospitals, held meetings in September and October 1962 and their report was subsequently adopted by the parent body.



TABLE 5  
PAYMENTS BY CANADA UNDER HOSPITAL INSURANCE AND DIAGNOSTIC SERVICES ACT 1958-1963

Province	1958-59	1959-60	1960-61	1961-62	1962-63	Total Payments From July 1, 1958 to March 31, 1963
NAd.....	\$ 2,857,886.84	\$ 4,707,692.94	\$ 5,094,934.21	\$ 6,258,287.26	\$ 7,472,463.28	\$ 26,391,264.53
P.E.I.....		447,338.27	1,010,806.54	1,381,894.39	1,673,681.11	4,513,720.31
N.S.....	1,572,782.64	8,162,540.78	9,595,387.52	11,872,932.01	13,519,974.70	44,723,617.65
N.B.....		4,575,374.90	7,914,412.71	9,546,774.26	10,894,711.87	32,931,273.74
Que.....			13,936,740.72	73,022,517.78	88,713,635.41	175,672,893.91
Ont.....	13,140,213.12	71,892,833.66	84,484,271.86	104,498,880.55	122,103,382.61	396,119,581.80
Man.....	7,148,534.97	11,324,466.35	13,048,916.19	15,245,924.23	17,348,934.08	64,116,775.82
Sask.....	8,430,441.93	13,378,379.43	14,453,463.99	15,953,810.19	18,278,458.50	70,494,554.04
Alta.....	8,774,575.68	15,698,727.86	16,905,597.57	19,730,547.07	25,784,973.30	86,894,421.48
B.C.....	12,784,038.88	20,406,091.56	22,493,438.52	25,697,550.94	30,049,147.43	111,430,267.33
Yukon.....			168,683.75	296,036.35	310,267.36	774,987.46
N.W.T.....			261,849.89	377,941.52	523,148.02	1,162,939.43
Total.....	\$54,708,474.06	\$150,593,445.75	\$189,368,503.47	\$283,883,096.55	\$336,672,777.67	\$1,015,226,297.50



Advance payments to the provinces for insured services were maintained on a regular monthly basis in an amount which totalled \$323,718,024. Final settlement for 1960 resulted in an additional payment of \$11,971,746. The final contribution to Alberta for 1959 was made in the amount of \$983,006.

The position of consultant in hospital administration was filled by an experienced hospital administrator.

## INTERNATIONAL HEALTH

The increase of International Health activities has continued. Involving, in the first instance, Canada's membership in the World Health Organization and in the health components of other United Nations agencies, a progressive expansion in scope and activity has been experienced.

As a second major feature, International Health provides advice and practical support for the External Aid Office on requests from developing countries for technical assistance in the health field. This consists mainly of training programs for both undergraduate and post-graduate medical studies, including formal courses and advanced clinical experience at Canadian medical schools, hospitals and other institutions, and to a lesser extent recruitment of Canadian experts for service abroad.

In the case of W.H.O., the 15th World Health Assembly met in Geneva from May 8 to 25, 1962. The Canadian delegation consisted of Dr. G.D.W. Cameron, Deputy Minister of National Health, head of delegation, with Dr. B.D.B. Layton, Principal Medical Officer, International Health, alternate head, and Dr. Jean Saucier, Professor of Neurology, University of Montreal, third delegate. Dr. M. R. Elliott, Deputy Minister of Health for Manitoba, was alternate delegate with S. C. H. Nutting, W. E. Bauer and Miss L. Gauthier of the Department of External Affairs as advisers. Dr. Layton was elected to the chairmanship of the Committee on Administration, Finance and Legal Matters, one of the two main committees of the assembly.

Having previously explored the element of support for election by the assembly to membership on the Executive Board of W. H. O. with encouraging results, Canada formally submitted its candidacy and was successful by unanimous vote. Another important initiative was in connection with a decision ultimately taken by the assembly in the matter of clinical and pharmacological evaluation of drugs and the part to be played by W. H. O. in securing prompt transmission to national health administrations of new information on serious side-effects of pharmaceutical preparations. The outcome was gratifying and was further advanced at the later meeting of the Executive Board.

The assembly approved a budget for the financial year 1963 in the amount of U.S. \$32,105,570, of which Canada's share according to the established formula is U.S. \$880,210. The membership of W.H.O. had increased to 117 by the year's end, consisting of 116 regular members and 1 associate member.



As a regular service, International Health arranges upon request programs of visits for W.H.O. and P.A.H.O. Fellows, as well as other visitors travelling under their own government or private auspices. These involve both short-term travel and observation tours and more extended placement in departmental laboratories and provincial establishments.

Canada was represented by the Principal Medical Officer, International Health at the combined meetings of the Pan-American Sanitary Conference Regional Committee for W.H.O. in the Americas in Minneapolis, Minnesota, August 20 to September 7 1962. Participation is limited to scientific and technical items of the agenda, including presentation of a review of recent developments on the Canadian health scene.

The Principal Medical Officer, International Health, having been named to serve on the W.H.O. Executive Board, attended the 30th session in May, 1962 and the 31st throughout January, 1963, including the meeting of its Standing Committee on Administration and Finance, at which he was elected rapporteur.

Under the various External Aid Programs, recent trends will be seen in the following brief tabulation indicating movement of all health trainees during the past three years.

	1960	1961	1962
Arriving in Canada .....	63	96	72 (34)*
In Canada during the year .....	120	182	89
Departing for home country .....	39	61	78

---

\*Placement pending at year's end.

A survey of health scholars in Canada at the end of the fiscal year 1962-63 showed a total of 84 following courses leading to degrees or diplomas, 35 of whom are engaged in undergraduate medical studies, 22 in various public health disciplines, including hospital administration, and 12 in post-graduate nursing courses.

During the summer holiday season, International Health is responsible for the placement of Colombo Plan and other aid programs, undergraduate students chiefly in departmental laboratories and also those associated with the individual medical schools.

Arising out of an earlier visit by the health authorities of Nigeria, assistance was provided in recruitment of professional staff for the new medical school at Lagos and, under the External Aid Program, the provision of specialists in anaesthesiology and pathology to head up the respective departments at the Kumasi Hospital, Ghana. Toward the latter part of the year plans were being studied to assume similar responsibilities for the Canadian experts in Nigeria.



## NATIONAL HEALTH GRANTS

The National Health Grants program has completed 15 years of operation.

Many changes and advances have been made in public health, in Canada and elsewhere. Perhaps the most spectacular has been the reduction in deaths from tuberculosis and new patterns of treatment which followed discovery of drugs effective against the tubercle bacillus. In more recent years development of Salk and Sabin vaccines against poliomyelitis has given rise to hopes that this disease can be virtually eliminated. However, a rising incidence of venereal diseases and sporadic outbreaks of other communicable diseases, here or abroad, indicate that many old problems of public health are still extant and continuing vigilance must be exercised to ensure they do not again become major menaces to health.

Basic to any program of preventing illness and promoting health is an adequate network of local health services, adequately staffed and supported. The past 15 years have witnessed a steady growth in this branch of public health with the organization of many new county or regional health units in areas not previously served by full-time public health services and broadened programs and more staff in those local health services in operation prior to 1948.

The past years have also seen the growth of a new interest, both in provincial and local departments of health, in programs of occupational health, in control of pollution in air and water, in hazards of radiation, in importance of home care services for patients who might otherwise require care in a hospital, and in medical rehabilitation.

A revolution is occurring in the approach to problems of mental health, with the use of tranquilizing drugs; the trend toward smaller mental hospitals; the "open door" policy; the development of community mental health clinics and psychiatric wards in general hospitals; "day" hospitals and "night" hospitals; and a closer association between mental health services and those provided by local health departments.

Less striking but nonetheless significant advances have been made in cancer detection and control, notably in more widespread use of cytological methods for early detection of cancer, the use of cobalt 60 in treatment and utilization of epidemiological studies to elucidate possible causes of this disease.

Contributing to these developments have been a steadily growing volume of research and an increasing number of public health workers professionally trained in the several disciplines required for a well-rounded program.

At one time or another National Health Grants have contributed substantially to all these developments, and many continue to receive support. In fact, the amount of federal assistance toward these programs has been increasing steadily and in 1962-63 reached approximately \$30,500,000 for general health grants and \$20,000,000 for hospital construction.

The hospital construction grant, largest in the program, continued unchanged in 1962-63. Demands on this grant continued at a high level, with only two provinces committing less than 80 per cent of funds available to them.



TABLE 6  
EXPENDITURES UNDER THE NATIONAL HEALTH GRANTS 1962-1963

Province	Hospital Construction Grants	GENERAL HEALTH GRANTS								Total Health Grants	
		Professional Training	Mental Health	Tuberculosis Control	Public Health Research	General Public Health	Cancer Control	Medical Rehab. and Crippled Children	Child and Maternal Health		Total
Nfld.....	\$ 633,404	\$ 90,220	\$ 209,887	\$ 139,360	\$ .....	\$ 357,942	\$ 12,845	\$ 56,905	\$ 42,541	\$ 909,700	\$ 1,543,104
P.E.I.....	133,667	15,342	74,163	28,691	.....	170,661	16,187	10,843	10,830	326,717	460,384
N.S.....	1,319,249	81,291	367,736	139,573	61,670	614,745	59,547	62,944	51,876	1,439,382	2,758,631
N.B.....	700,200	51,636	296,322	125,069	.....	490,563	124,412	79,064	35,619	1,202,685	1,902,885
Que.....	5,785,907	500,711	2,331,223	1,237,567	562,436	1,922,914	586,066	628,331	500,852	8,270,100	14,056,007
Ont.....	6,558,364	410,049	2,553,917	714,028	529,280	3,275,154	1,170,380	211,572	365,617	9,229,997	15,788,361
Man.....	825,066	49,979	421,792	165,952	56,800	685,152	180,497	108,599	79,136	1,747,907	2,572,973
Sask.....	880,777	67,253	378,048	136,197	37,802	602,577	181,618	124,263	69,982	1,597,740	2,478,517
Alta.....	1,694,021	133,322	643,984	210,175	97,842	1,069,935	257,146	110,322	93,179	2,615,905	4,309,926
B.C.....	1,463,459	111,872	625,320	240,393	104,198	1,173,068	307,403	186,888	95,997	2,845,139	4,308,598
N.W.T.....	5,886	.....	.....	5,724	8,271	62,883	2,221	992	.....	80,091	85,977
Yukon.....	.....	.....	20,717	9,283	.....	.....	.....	.....	.....	30,000	30,000
Total.....	\$ 20,000,000	\$ 1,511,675	\$ 7,923,109	\$ 3,152,012	\$ 1,458,299	\$ 10,425,594	\$ 2,898,322	\$ 1,580,723	\$ 1,345,629	\$ 30,295,363	\$ 50,295,363



### **Administration**

In addition to the regular series of meetings held with representatives from each province for the review of their health grants projects and the financial implications involved, a special round of meetings was held in mid-1962 following announcement of plans to curtail federal expenditures because of a crisis in foreign exchange reserves. The provinces co-operated in meeting this situation, and claims for reimbursement were limited accordingly.

Consultants of the department continued to provide assistance in assessment of health grants projects. These activities and information on the impact of the grants on their special interests are described in other sections of this report.

### **Public Information**

The large volume of information accumulated since the program began has been utilized by divisions of the department and outside agencies in preparation of reports and studies. On several occasions information was provided to the Royal Commission on Health Services.

## **RESEARCH DEVELOPMENT**

The Research Development Section co-ordinates all aspects of the department's scientific and medical research programs, and maintains liaison with other federal government and national voluntary agencies that support medical research. Independent scientific appraisal of applications for research grants is arranged. Contact is maintained with recipients of such grants on technical aspects of their research work. Research grants under this program are made on a project basis, implying an application to a defined problem which is of interest to provincial and federal health services. They are, therefore, related to the "burden of disease" in Canada. Studies are conducted to aid in defining these diseases and the services involved.

Emphasis at present is being placed on: public health administration, epidemiological studies, communicable diseases, environmental sanitation, and some clinical research which may be of value for mental health, cardiovascular disease, child and maternal health, arthritis, neurological disease, etc. The application to establish Canadian health needs and health services, as sponsored by provincial and national health departments, helps to distinguish this research program.

### **Total Assistance for Research 1962-63**

An aggregate of \$5,736,291 or 31 cents per capita, was allocated for intramural research activities plus the extramural grants-in-aid of health research. This represents a slight decrease under total allocations for a similar period in 1961-62.

## Intramural Research

Research is carried on within the department, in well-equipped laboratories or clinic services of the Health Branch, while in the Administration Branch studies are conducted in the socio-economic field. Estimates provided by the reporting units indicate a total intramural research budget of \$2,172,000.

TABLE 7

### SUMMARY OF INTRAMURAL RESEARCH PROGRAM 1962-1963

Directorate or Division	Research Budget Forecast: In \$(000's)	Per Cent of Total
Health Branch:		
Food and Drug Directorate.....	814	37.5
Indian and Northern Health Services Directorate.....	146	6.7
Medical Advisory Services:		
Civil Aviation Medicine Division.....	3	.1
Health Services Directorate:		
Dental Health Division.....	30	1.4
Epidemiology Division.....	29	1.3
Hospital Design Division.....	5	.2
Laboratory of Hygiene.....	268	12.3
Medical Rehabilitation and Disability Advisory Service.....	1	.1
Mental Health Division.....	8	.4
Nutrition Division.....	28	1.3
Occupational Health Division.....	210	9.7
Public Health Engineering Division.....	7	.3
Radiation Protection Division.....	212	9.8
Total for Health Branch.....	1,761	81.1
Administration Branch:		
Research and Statistics Division.....	340	15.6
Library.....	71	3.3
Total for Administration Branch.....	411	18.9
Total for Intramural Research.....	2,172	100.0



TABLE 8

## ALLOCATIONS FOR RESEARCH UNDER THE NATIONAL HEALTH GRANTS PROGRAM 1962-1963

Province	Mental Health	Public Health Research	General(a) Public Health	Medical Rehabilitation and Crippled Children	Child and Maternal Health	Cancer(b) Control Grant	Total
Nfld.	\$	\$	\$	\$	\$	\$ 10,000	\$ 10,000
P.E.I.						2,963	2,963
N.S.	23,514	89,343			11,968	15,000	139,826
N.B.							
Que.	345,703	576,895	223,201	34,704	205,178	111,209	1,496,893
Ont.	267,007	581,306	21,061	60,124	211,051	106,070	1,246,622
Man.	31,560	67,379			8,625	6,000	113,564
Sask.	100,432	51,862	8,360		16,400		177,055
Alta.		109,786		4,600	14,086		128,472
B.C.	58,830	123,528	17,336	8,592	32,404(c)		240,692
N.W.T.		8,200					8,200
Total	\$ 827,046	\$ 1,608,299	\$ 269,958	\$ 108,020	\$ 499,712	\$ 251,242	\$ 3,564,287
Per Cent of Total	23.2	45.2	7.6	3.0	14.0	7.0	100.0

(a) The total for the General Public Health Grant includes purchases of research equipment: Quebec: \$17,830; Ontario: \$191; British Columbia: \$12,469.

(b) The amounts of the Cancer Control Grant used to assist research under the National Cancer Institute are given by provinces. Data for Ontario include: \$40,970 for the Ontario Cancer Treatment and Research Foundation plus \$65,100 for the National Cancer Institute.

(c) Includes \$1,060 for purchase of research equipment only.

Note: Amounts allocated as of March 20, 1963.

## Extramural Research

The Health Grants Program assists research under several separate grants. The Public Health Research Grant is made available through the provinces, in a common pool, on a non-sharing basis, at 10 cents per head of population. Other grants, allocated to the provinces in specified amounts and with certain conditions for various services, may also be used for research. The most extensive such assistance is given under the grants for mental health and for child and maternal health. An aggregate of \$3,564,291 was allocated to assist extramural research under National Health Grants. The total sum allocated represents a decrease of \$482,116 in the total allocations for a similar period in 1961-62. This decrease reflects certain financial restrictions during 1962-63. Other assistance, as requested by the provinces, continued in such areas as purchase of equipment, training of staff, and other forms of support.

TABLE 9

### DISTRIBUTION OF RESEARCH UNDER NATIONAL HEALTH GRANTS 1962-1963

Department	Number of Projects	Amount	Per Cent of Amount
Psychiatry.....	35	\$488,486	14.7
Medical Research Institutes.....	30	414,976	12.5
Surgery.....	23	324,405	9.8
Paediatrics.....	40	314,271	9.5
Medicine.....	21	226,058	6.8
Obstetrics.....	17	188,058	5.7
Public Health, Social and Preventive Medicine.....	17	152,662	4.6
Psychology.....	15	141,069	4.3
Bacteriology.....	12	114,047	3.4
Ophthalmology.....	9	110,696	3.3
Biochemistry.....	8	96,550	2.9
Physiology.....	6	89,397	2.7
Pharmacology.....	7	71,715	2.2
Physiological Hygiene.....	4	59,751	1.8
Schools, to include Hygiene, Nursing, etc.....	6	50,220	1.5
Haematology.....	5	49,009	1.5
Dentistry.....	4	44,870	1.4
Anaesthesia.....	4	42,908	1.3
Clinical Investigation Unit.....	2	35,246	1.1
Microbiology.....	4	31,953	1.0
Pathology.....	5	29,905	.9
Social Work.....	3	28,176	.9
Parasitology.....	2	23,200	.7
Histology.....	3	17,987	.5
Neurology and Neurosurgery.....	2	17,670	.5
Genetics.....	2	17,075	.5
Chemistry.....	1	15,950	.5
Speech Pathology and Audiology.....	2	15,542	.5
Radiology.....	3	15,460	.5
Laboratory (Hospital).....	3	14,950	.4
Physics.....	1	14,560	.4
Other Departments.....	2	14,276	.4
Nutrition.....	2	11,500	.4
Allergy.....	1	11,200	.3
Biophysics.....	1	9,400	.3
Pathological Chemistry.....	1	6,591	.2
Endocrinology.....	1	3,250	.1
Total.....	304	\$ 3,313,039	100 0



Classification

Classification of projects was changed from the “Field of Medicine” and “Disease Entity” index system to a three-index system:

- Category A — according to the department where the investigator is holding a position or carries out the work;
- Category B — according to field of investigation or predominant method used;
- Category C — according to the International Statistical List of Diseases, Injuries, and Causes of Death, with two added categories; “Diverse disease entities (more than one)” and “No disease entity involved”.

TABLE 10  
DISTRIBUTION OF RESEARCH UNDER NATIONAL HEALTH GRANTS  
ACCORDING TO DISEASE GROUPS — 1962-1963

International Classification	Number of Projects	Amount	Per Cent of Total Amount
Mental, Psychoneurotic and Personality Disorders.....	66	\$738,161	22.3
Diseases of Circulatory System.....	38	443,138	13.4
Infective and Parasitic Diseases.....	41	423,708	12.8
Diverse Disease Entities (More than One) .....	23	273,854	8.3
Diseases of Nervous System and Sense Organs.....	21	266,700	8.0
Allergic, Endocrine, Metabolic and Nutritional Diseases.....	31	259,669	7.8
Pregnancy, Childbirth and Puerperium — Complications .....	12	136,911	4.1
Diseases of Respiratory System.....	10	133,809	4.0
No disease Entity Involved .....	12	123,200	3.7
Congenital Malformations.....	7	116,355	3.5
Accidents, Poisonings and Violence.....	7	94,630	2.9
Diseases of Blood and Organs.....	9	75,568	2.3
Diseases of Early Infancy.....	7	65,136	2.0
Diseases of Bones and Organs of Movement.....	9	63,063	1.9
Diseases of Digestive System.....	5	50,370	1.5
Diseases of Skin and Cellular Tissues.....	3	34,848	1.1
Diseases of Genito-Urinary System.....	3	13,920	.4
Total.....	304	\$ 3,313,039	100.0

## **SPECIAL HEALTH SERVICES**

### **CHIEF NURSING CONSULTANT**

The Chief Nursing Consultant's unit has continued to provide an advisory service in the field of nursing not covered by specialist nursing consultants in the department. This includes: (a) consultant service within the department (b) relationship with the nursing profession and related fields (c) assistance to the provinces on a request basis.

In April 1962 the position of Public Health Nursing Consultant was filled. The balance of the year was occupied largely by travel designed to orientate the Public Health Nursing Consultant to the provinces, and with attendance at professional meetings.

At present the role of the Public Health Nursing Consultant would seem to be developing along three lines: (1) assistance to the Chief Nursing Consultant (2) assistance in problems associated with nursing research in the provinces, on a request basis (3) assistance in development and co-ordination of programs for international nursing students and visitors.

Concerning (2), plans are proceeding for a study of public health nursing activities (sponsored by the Canadian Public Health Association) in which the Public Health Nursing Consultant will be involved. It is anticipated this study will be carried out in one province. In addition a request has been received from another province for assistance with evaluation of its public health nursing program.

The second Federal-Provincial Nursing Conference was held in January, 1963. Discussion centered on three areas: (1) evaluation of public health nursing program (2) continuity of nursing care (as between hospital and community) (3) preparation of public health nurses.

As in former years the Chief Nursing Consultant's unit has been concerned with the assessment of Health Grant projects having a nursing connotation.

### **CHILD AND MATERNAL HEALTH**

The broad purpose of the division is to promote the optimum health of mothers and children in co-operation with provincial health departments, other health agencies and professional groups.

#### **Study of Current Programs and Problems**

This year marked the fifth annual two-day meeting of the Maternal and Child Health Advisory Committee. This committee provides the division with a valuable channel of communication among public health workers, clinicians and university departments of obstetrics, paediatrics and nursing. The wide range of



subjects discussed and the broad interest of the membership focused attention on the need for continued study of maternal and child health problems on a national basis. Topics included: phenylketonuria laboratory testing facilities, co-ordination of private medical care and public health services, the thalidomide experience, provincial programs, health education and poliomyelitis vaccines. It was recommended that a subcommittee on nursing would be a valuable addition to the committee's structure.

### **Subcommittee on Research**

The subcommittee reviewed 57 projects, 25 of which were new, submitted under the Child and Maternal Health Grant, and 22 projects under the Public Health Research Grant. Funds requested for research under the Child and Maternal Health Grant were \$635,000. The sub-committee was concerned about the need for adequate funds to meet growing demands for research in the field of maternal and child health.

### **Subcommittee on Standards of Care**

At its two-day meeting the subcommittee completed its discussion of tabulated data relating to the "Survey of Maternity and Newborn Care in Canadian Hospitals", carried out in 195 hospitals by provincial health departments. It recommended that working parties be set up to draft specific sections of the standards.

### **Subcommittee on Statistics**

It was impossible to hold a meeting this year due to the pressure of other matters. The subcommittee's working party on classification of perinatal deaths completed one part of its study. However the subcommittee has an informal commitment to make a report to Canadian authorities having the responsibility of formulating Canadian opinion in this area for the 1965 Revision of the International Statistical Classification of Causes of Death.

### **Thalidomide**

The thalidomide problem had a great impact on the program of the division.

A pilot study of thalidomide among pregnant women in Ottawa was carried out in co-operation with the Ottawa Academy of Medicine and the Ottawa Pharmaceutical Society. The data are now being analyzed.

A case finding and epidemiological study of children with associated malformations was undertaken on a national basis. Contacts have been maintained with professional associations, particularly the Society of Obstetricians and Gynaecologists and the Canadian Paediatric Society as well as with provincial authorities, which sent in detailed individual case material. This is being assembled for presentation at the Canadian Medical Association meeting in the spring.

The Expert Committee on the Habilitation of Congenital Anomalies Associated with Thalidomide engaged the services of the division when frequent



meetings were being held and reports prepared. It is expected implementation of recommendations of this committee will become primarily the concern of the Medical Rehabilitation and Disability Advisory Service but this division will retain a contact with developments.

The Expert Committee on the Occurrence of Congenital Anomalies is the prime responsibility of this division as to conduct of the committee's work. It has held three meetings and a preliminary report is to be presented at the Dominion Council of Health meeting in April. This is an important committee engaged in the solution of a very difficult problem and should be expected to carry on for some time exploring various aspects of case finding and possibly getting more deeply into the field of research needs and recommended research activities in the field of human teratology.

### **Health Grants Program**

The program provides a basic means for co-ordination of departmental information and policy and helps to make contacts with the provinces practical. With the amalgamation of the Crippled Children and Rehabilitation Grants, projects concerned with health services for children may be submitted under several grants where they must compete for funds with projects for service to adults. Grant funds are assisting in the support of a number of provincial maternal and child health consultant services and the training of professional staff. Assistance is provided in a number of areas including programs for children with speech, hearing and vision problems, administration of registries for handicapped children, dental care programs for children, treatment of RH disease in newborn infants and genetic counselling.

A high percentage of the Child and Maternal Health Grant is being used for research and almost a third of maternal and child health research projects were this year submitted under the Public Health Research Grant. Funds are assisting in the expansion of research programs in obstetrics and pediatrics. Important areas being explored are obstetrical problems, respiratory problems of the newborn, childhood diseases of infectious origin, blood disorders in the mother and baby, problems of chronic disability through genetic studies, some forms of mental retardation of metabolic origin, surgical problems, eye disorders, and conditions of metabolic and nutrition origin.

### **Health Education**

It is a matter of concern that this important part of our program has been neglected the past few years. Due to lack of staff, a much needed revision of "Canadian Mother and Child" has been suspended. Other items requested, for example, materials on health of pre-schoolers and older children have not been undertaken. We have received from the printers two companion pieces "Score High for Health" a check sheet and poster on health habits for young school children. Work continued on the preparation of radio scripts.

Considerable time and effort on the part of the chief and the technical officer are being given to the work of the Directorate Subcommittee on Health



Education. Its present activities are directed towards formulation of a much needed policy on health education for the directorate.

### **Consultation**

The chief of the division made one trip to the western provinces and made contacts in Quebec and Ontario; the nursing consultant in addition to field trips in three provinces conducted two two-week institutes, one in Manitoba and one in Hamilton and participated in a refresher course on paediatric nursing at Dalhousie University. She assisted in the planning of a survey of nursing aspects of child health conference services in Saskatchewan.

### **Relation with Other Divisions and Directorates**

Close liaison has continued with the Nutrition Division in ensuring promotion of a common philosophy and sound technical information on the nutrition of mothers and children. Several related topics discussed at the Canadian Council on Nutrition and the Child and Maternal Health Advisory Committee resulted in a suggestion that these two groups hold a joint meeting in the near future.

Consultation with the Food and Drug directorate was more frequent during the past year, due to problems associated with thalidomide and liaison continued in relation to the poison control program in conjunction with the Epidemiology Division. The question of vitamin additives to foods received our joint consideration.

Assistance was given to the Hospital Design Division on the design of nurseries, paediatric units and formula rooms; lectures on medical and nursing matters were given at the Civil Defence College and assistance regarding emergency supplies and materials for infants and children was given Emergency Health Services and Emergency Welfare Services. Collaboration continued with Medical Services Directorate on institutes for nurses and educational materials on child health. The nursing consultant as a member of the Departmental Nursing Committee assisted with the planning for and participated in the one-week Federal-Provincial Nursing Conference.

### **1961 Population Statistics**

Canada with a birthrate of 26.1 has an expanding population. In 1961 there were 475,700 live births in a population of 18,238,000. Over one-third of the population is under 15 years of age. The fertility rate among teenage mothers remains high. These trends necessitate an expansion in education and service programs for mothers and children.

### **Infant Mortality**

The infant death rate was 27 per 1,000 live births. Out of 475,700 live births, 12,940 infants died in their first year and about 8,564 died in the first four weeks of life. The main causes of death in order of importance were immaturity, congenital malformation, pneumonia, asphyxia and birth injury.

## Maternal Deaths

In 1961, 219 mothers died in Canada, a rate of 46 per 100,000 live births. The main causes were haemorrhage, sepsis and toxemia.

Morbidity figures on childhood diseases are much less precise, but more attention is being given to early recognition and specialized treatment of conditions causing disabilities. The thalidomide tragedy has aroused greater interest in the need for more systematic collection of information on handicapping conditions and congenital malformations in particular.

TABLE 11

### EXPENDITURE OF NATIONAL HEALTH GRANTS

Year	Child and Maternal Health Grant	Funds Available	Funds Expended	Per Cent Expended
1953-54.....		\$ 500,000	114,341	23
1954-55.....		1,000,000	560,385	56
1955-56.....		2,000,000	1,009,408	50
1956-57.....		2,000,000	993,277	50
1957-58.....		2,000,000	1,165,550	58
1958-59.....		2,000,000	1,700,420	85
1959-60.....		2,000,000	1,842,161	92
1960-61.....		1,750,000	1,423,176	81
1961-62.....		1,750,000	1,388,443	79

## DENTAL HEALTH

This division promotes activities directed to prevention and control, particularly in children, of dental diseases and abnormalities. It conducts and encourages research in preventive measures which appear to hold promise of effective mass application, promotes health education and production of health education materials. It also provides consultant and liaison services to provincial health departments, other divisions and directorates of this department, other federal agencies, the Canadian Dental Association, universities, voluntary health agencies, dental scientific and research bodies and dental agencies of other countries, including W.H.O.



**Research**

A report was published on dental effects of water fluoridation presenting data obtained in Brantford, Sarnia and Stratford surveys of 1961.

Final surveys in these three cities were completed this year, with all native-born children in their 17th and 18th year being dentally examined and having their caries status recorded. A report on these surveys will be made in the 1963-64 fiscal year.

The division continues to collect extracted teeth from native-born Brantford children for analysis at the University of Toronto to determine effects of fluoride on tooth composition.

**Health Education**

This division works closely with provincial dental divisions, other divisions of the department whose health education activities are related and with dental and other voluntary agencies concerned with health education.

This year one new poster and three radio scripts were produced.

**Consultant Services**

The division provides consultant services on dental programs and related dental matters for provincial health departments. Matters of mutual concern are discussed with provincial dental directors on annual visits and dealt with by correspondence.

Collaboration is maintained with Medical Services Directorate, Public Health Engineering, Emergency Health Services, Food and Drug Directorate, Child and Maternal Health, Health Grants, Research and Statistics and, to a lesser degree, with other departmental units whose work has some bearing on dental health.

Close liaison is maintained with the Canadian Dental Association and its related professional groups and with the seven Canadian dental schools.

**Other Activities**

Three issues of a newsletter designed for exchange of information among people engaged in dental public health work in Canada were published.

Two papers were published in professional journals. Addresses were delivered to one major dental meeting and several smaller ones and one television appearance was made.

The division handles as an information service a heavy volume of correspondence and inquiries within Canada and beyond relating to public health dentistry, dental research and general dental matters.

**EMERGENCY HEALTH**

The division provides leadership in three fields of emergency health planning. They are:



(1) Planning for those responsibilities defined in the Civil Defence Order 1959 (PC 1959-656) as:

“The Minister of National Health and Welfare shall have and exercise the following Civil Defence powers, duties and functions;

(a) assistance to provincial and municipal governments and to others in connection with the organization, preparation and operation of medical, nursing, hospital and public health services.”

(2) Planning for provision of emergency civilian health services during the long rehabilitation period and for the duration of the war emergency.

(3) Co-ordinating plans to ensure continuity of the Health Branch in an emergency.

It achieved several of its objectives and some of the provinces made considerable progress in health planning. The majority of municipal health departments, however, have yet to begin their planning and this major gap in our national preparedness gives the greatest concern. The division has been attempting to fill the gap by a change of emphasis within the five major programs, the goals of which are:

- (a) To make family units self-sufficient for seven days.
- (b) To make municipal health services self-sufficient for seven days with pre-planned mutual support.
- (c) To make provinces/regions self-sufficient for 30 days.
- (d) To make Canada self-sufficient for six months.

### **Continuity of Government**

The Cuban crisis in October 1962 was a potent stimulus to development of this program at all three levels of government and in all departments. The Health Branch of the Department of National Health and Welfare is now fairly well prepared to continue to function in an emergency. Planning, personnel, essential records and standby legislation for implementation under the War Measures Act are ready. Exercises will test their effectiveness during 1963. The division represented the Health Branch in Exercise Fallex 62.

In co-operation with Information Services, the division prepared on tape a series of radio broadcasts outlining public health precautions to be taken during a wartime disaster for use on emergency broadcasts by the Canadian Broadcasting Corporation.

The provincial departments of health have made good progress in the continuity of government field since the Cuban crisis and the subsequent exchange of ideas at the Federal-Provincial Emergency Health Services Conference held in November 1962. Municipal health departments are beginning to catch up and should make better progress in the next fiscal year.

### **Organizational Program**

Appointment of a health planning officer in each of the remaining provinces enabled the division to conduct the first comprehensive Federal-Provincial EHS



Conference attended by the ten provincial EHS directors, ten federal regional EHS officers of the EHS division.

The federal division had consultants appointed in each of its five sections and obtained authority for a small increase in its staff.

The following action was taken during the year:

- (i) Appointment of an advisory committee on emergency public health planning.
- (ii) Development and promulgation of steps in municipal health planning.
- (iii) Review and promulgation of a policy on hospital disaster planning.
- (iv) Establishment of a survey, under contract, of water processing procedures with development of techniques for waterworks engineers.
- (v) Development of a policy on emergency clinics.
- (vi) Development with Emergency Measures Organization and Department of National Defence of a policy for the transportation of casualties.

Provincial departments are now building up their own planning staffs and are also advising and assisting municipalities to do the same.

### **Information Program**

The division provided the Royal Commission on Health Services with data on manpower, participated in federal committees and Defence Research Board Panels and took the opportunity of presenting its views to the Dominion Council of Health, the National Convention of Food Processors, the Canadian Nursing Association, the Canadian Pharmaceutical Association, the Canadian Medical Association, the Defence Medical Association, the Canadian Hospital Association, the American Medical Association.

The division published and distributed these printed items: "Emergency Blood Services", "Second Canadian Edition, NATO Handbook on Emergency War Surgery", "Family Health Planning for Disaster", including a first aid supply check list, "Catalogue of Publications", "Manual on Hospital Disaster Planning", "Manual on Water Services Sanitation", special issues of "Canadian Medical Journal", "Union Médicale", "Canadian Nurses Journal", "Infirmière Canadienne", "Canadian Public Pharmaceutical Journal", "Canadian Dental Journal" and "Canadian Hospital".

In conjunction with Information Services the division developed displays to demonstrate the role of the pharmacist, disaster casualty care and hospital disaster planning.

### **Educational Program**

In the field of first aid and home nursing, the division is pleased to record the achievement of the St. John Ambulance Association in training 190,000 Canadians in first aid of whom 1,143 were federal civil servants outside Ottawa and 855 were federal civil servants in Ottawa. A further 9,000 Canadians were trained in home nursing. First aid training was included in the high school curricula of three provinces.



Emergency Health Services officers participated in the education of medical students at Dalhousie, Montreal, McGill, Toronto, Western and Manitoba universities and in the education of nurses at schools of nursing in five provinces.

The policy of health training at the Canadian Civil Defence College, Arnprior, was changed from basic orientation to advanced staff training. Future physicians and dentists' courses and nurse specialists' courses will be conducted by the provinces.

The division conducted these courses: health operations and administration, emergency public health planning, nurse educators, nurse specialists, physicians and dentists, pharmacists, casualty simulation instructors.

Officers of the division, in co-operation with representatives of the Canadian Hospital Association, assisted in hospital disaster institutes and exercises at Halifax, Nova Scotia and Saint John, New Brunswick, which emphasized the need for preparing for peacetime disasters. Preliminary preparations were made for a larger series of institutes and exercises in the next fiscal year.

### **Health Supplies**

The Health Supplies Section of the division progressed towards the assembly of the \$18,000,000 authorized stockpile by completing the necessary orders and accepting delivery of \$13,000,000 worth of supplies.

The program of equipment development completed field tests of hospital folding beds and assessed anaesthetic apparatus, generators, stoves and water containers.

The Plouffe Park Depot packaged 5,395 boxes to complete the advanced treatment centres, 16 emergency hospitals, ward equipment for 184 emergency hospitals and large numbers of smaller items for inclusion in major packages.

The depot also shipped the Maritime allocation of 34 truck loads of supplies to the newly opened depot in Debert. The division increased its warehousing capability by completing its arrangements to take over the Macdonald RCAF Station Depot and it is reviewing with the Department of Public Works the total warehousing program.

Having completed agreements with nine provincial departments of health, the division shipped 348 hospital disaster supplies units to Canadian hospitals. It opened the final phase of the distribution of 630 advanced treatment centres across Canada by an agreement with British Columbia.

The resources survey program made good progress in many of its activities. A full knowledge of the capability of the pharmaceutical and related industries will become available in the next fiscal year when the program is completed.

### **EPIDEMIOLOGY**

The primary functions of the Epidemiology Division are consultation, disease surveillance, research, and provision of technical information on epidemiological aspects of communicable and non-communicable diseases and related public health programs.



### **Advisory Committee on Epidemiology**

The national Advisory Committee on Epidemiology was established in 1962. Its purpose is to assist and advise the Minister and appropriate officers of the Department of National Health and Welfare on matters relating to the study and control of communicable and non-communicable diseases including chronic illness; and to assist in development of the most effective epidemiological services for the benefits of the country as a whole. The committee will meet regularly and will report to the Dominion Council of Health. The first meeting of the committee was held in Ottawa in December 1962.

### **National Health Grants**

As part of its consultant service, the division reviews applications for National Health Grants respecting tuberculosis, venereal disease, poliomyelitis, cancer, local health services and referred research projects, and undertakes associated field visits.

### **Disease Surveillance — Epidemiological Bulletin**

The division maintains surveillance of communicable and non-communicable diseases in Canada and other countries. Many sources of information are regularly reviewed. Information of particular epidemiological interest in Canada is published in the "Epidemiological Bulletin" in order to provide current information to medical officers of health, public health laboratory workers and other public health practitioners.

### **Poliomyelitis**

The division is represented on the National Technical Advisory Committee on Live Poliovirus Vaccines. The division's function is to collect epidemiological information, prepare reports, and participate in committee decisions. The committee provided considerable information leading to the licensing of live oral poliovirus vaccine (Sabin) on March 2, 1962. Approximately four million persons were fed Sabin vaccine in 1962. The committee maintained close surveillance of the feeding programs and made recommendations to the Dominion Council of Health concerning the continued use of Sabin vaccine. In 1962, 88 cases of paralytic poliomyelitis were reported, the lowest number on record for any one year.

### **Viral Hepatitis**

The division is represented on the national Advisory Committee on Viral Hepatitis which was established in 1962 on the recommendation of the Dominion Council of Health. The division provided epidemiological information and participated in committee decisions. The high incidence of viral hepatitis continued in 1962; 12,558 cases were reported compared to 12,381 cases in 1961.

### **Tuberculosis**

The division assisted in planning for the Second National Conference on Tuberculosis which was held in Edmonton in June 1962. The conference stressed



the importance of supervision of tuberculosis cases in the community and the value of case registers in tuberculosis surveillance and control. The division has assisted in the implementation of conference recommendations.

### **Venereal Disease**

Following World War II there was a marked decline in reported venereal disease. This decline stopped in 1958 and since that time there has been a rising trend, particularly in infectious syphilis. In 1958, the rate of reported infectious syphilis per 100,000 population was 1.2 and the rates have increased to 4.2 in 1962. Special measures were recommended by the Advisory Committee on Epidemiology to help counter the rising trend.

### **Survey of Mortality in Relation to Smoking Habits, Residence and Occupation**

In 1955, the Epidemiology Division, the Research and Statistics Division and the Department of Veterans Affairs undertook a continuing prospective study on the relationship of smoking habits, residence and occupation to death from lung cancer and other selected causes among recipients of pensions from the Department of Veterans Affairs. A preliminary report was published in the March 1961 issue of the "Canadian Journal of Public Health". The study was terminated in 1962 to provide a six and one-half year study period.

### **Accidents**

Accidents are the third leading cause of death for all ages combined and are the leading cause of death for ages 1 to 35 years. Motor vehicle accidents are the greatest single cause of accidental deaths followed by home accidents. The division was associated, in 1962, with development of a Canadian standard for automobile safety seat belts. It assisted in planning for a permanent organization to stimulate and co-ordinate research in the medical aspects of traffic accidents. In 1962, the division published a medical bibliography on traffic accidents. The division works closely with other agencies interested in accident prevention.

### **Survey of Health Unit Services in Canada**

In 1960, a joint questionnaire survey of local health services was undertaken by the Epidemiology Division, the Research and Statistics Division, and the School of Hygiene of the University of Toronto. The survey covered eight provinces excluding Quebec and Newfoundland and the report was published in 1961. A paper on highlights of the survey was prepared in 1962 and has been submitted for publication. In 1961, a similar survey was made in Quebec in association with the School of Hygiene, University of Montreal. Results have been tabulated and analyzed.

## **HOSPITAL DESIGN**

The Hospital Design Division is primarily concerned with maintaining a consultant and advisory service related to planning and construction of hospitals and health facilities.



## **Canadian Building Standard for Hospitals and Health Facilities**

Production of these standards has taken longer than anticipated. Progress is most advanced on general conditions, mental health and long-term hospitals. Headings are as follows:

General conditions — These are standards applicable to all hospitals. The standards include building planning procedures, structural and fire safety requirements, food services and engineering services.

General hospitals — Standards for general treatment facilities, diagnostic services and comprehensive care.

Mental health facilities — Standards for facilities for care and treatment of the mentally ill, including hospital schools for the mentally retarded.

Long-term active treatment hospitals — Standards for facilities for the chronically ill, including rehabilitation, convalescent and geriatric care.

## **Information and Research**

The division studied and made available information on hospital design and equipment, answered inquiries, produced reports and delivered lectures on hospital planning developments. It also assisted, promoted and guided research studies related to hospital buildings and equipment. Among the projects were:

Hospital Food Services — Based on a questionnaire sponsored by the Canadian Dietetic Association, and in collaboration with the association's hospital standards committee and the Nutrition Division, the Hospital Design Division developed a detailed statement of floor area planning ranges for all food service components in hospitals with bed rating ranges from 25 to 1,200.

A series of charts, graphs and diagrams were developed to illustrate the appropriate chapter in "Canadian Building Standards for Hospitals and Health Facilities".

National Research Council Committee on Control of Hospital Infections — In connection with this committee, a paper was published on "Air Condition for Operating Theatres". The division chief was one of three authors of the paper.

Hospital Committee of the Architectural Institute of British Columbia — The division chief was feature speaker and panel moderator.

## **Architectural Consultation**

The division chief also served as follows: member of the External Affairs Committee on Canadian Architecture abroad; chairman of the R.A.I.C. Committee on Code for Architectural Competitions; consultant to the Armed Forces Hospital Requirements Committee and to the Treasury Board Advisory Committee. In addition, at the request of provincial authorities, he visited several Canadian cities with reference to hospital design problems.

## **Hospital Construction Grants**

The division examined construction projects which involved grants and recommended amounts of federal grant assistance. It also rendered consultant



service to provincial and other hospital authorities in estimating in advance available grant funds related to specific projects.

Table 12

HOSPITAL CONSTRUCTION GRANT APPROVALS SINCE 1948

	1948-1963	1962-1963*
Patients, beds of all types approved for grant purposes .....	105,521	4,199
Newborn bassinets approved for grant purposes .....	13,340	707
Bed equivalent areas (diagnostic services) approved for grant purposes .....	18,463.6	1,448.0
Nurses' beds (residence) approved for grant purposes .....	21,206	711
Internes' beds (residence) approved for grant purposes .....	716	53
Net grants approved for renovations .....	\$ 14,960,870	\$ 3,476,901
Total grants approved for all construction	\$194,408,834	\$12,590,896

\*Preliminary figures.

## LABORATORY OF HYGIENE

The Biochemistry Research section of the Laboratory of Hygiene no longer exists as a unit. The cancer research program was suspended with the resignation of Dr. J. F. Morgan, who became Director of the Department of Cancer Research, University of Saskatchewan, in July. Those activities of the section which were necessary for the continuation of established programs in the laboratory were absorbed in other sections.

### Bacteriological Laboratories

*Enteric Bacteriology:* These laboratories serve as the National Reference Centre for diagnosis of the pathogenic enterobacteria — *Salmonella*, *Shigella* and *E. coli* — which cause typhoid, paratyphoid, dysentery and like diseases in man and enteritis in animals. The centre provides a highly specialized service for other Canadian laboratories by identifying enteric cultures, 2,855 of which were submitted during the year. In addition, more than 377,000 ml. of carefully standardized reagents were prepared for distribution to the provinces as a means of maintaining a high standard of work quality. Four *Salmonella* not previously reported in Canada — *S. escanaba*, *S. glostrup*, *S. israel* and *S. llandoff* — were identified. *S. thompson* was the serotype most frequently identified from human cases of salmonellosis; because of its high incidence in cake mixes and egg



products, this serotype also ranked first in non-human isolations. In human shigellosis, the incidence of *Sh. flexneri* infections was for the first time slightly greater than that attributed to *Sh. sonnei*. The centre prepared monthly reports, and a detailed annual report, recording the national incidence of enteric pathogens. A chapter, "Salmonellosis in Canada" was prepared for inclusion in a monograph entitled, "The World Problem of Salmonellosis".

*Staphylococci:* The National Reference Centre for the Bacteriophage Typing of Staphylococci received 1,804 cultures for identification, and distributed 378 typing phages and 407 standard propagating strains to Canadian and foreign laboratories. The centre collaborated with the International Reference Centre and other laboratories in an investigation of the comparative value of several standard and non-standard phages in typing of staphylococcal strains isolated from human and animal sources. Ten culture media were evaluated for use in routine typing. An intensive study was made of atypical Group III strains implicated in hospital infections in Canada and other countries; a paper based on the data obtained has been accepted for publication. The centre continued its participation in a phage-typing evaluation program conducted in the United States, and initiated a series of investigations on characterization and serological grouping of bacteriophages.

*Other Groups:* The Bacteriological Laboratories continued to provide a national service in the typing of *C. diphtheriae* and of haemolytic streptococci. A total of 893 cultures of *Strep. pyogenes*, and 134 cultures of *C. diphtheriae*, were received and typed, and 800 ml. of diagnostic streptococcal antisera were prepared and distributed to the provinces during the year.

*Sanitary Bacteriology:* The unit continued to assist the Division of Public Health Engineering and the Department of Fisheries in the control of shellfish growing areas in the Maritime Provinces. Bacteriological surveys were made in seven areas to determine the degree of public health hazard associated with sewage pollution. In addition, a total of 2,028 shellfish extracts were subjected to bioassay for paralytic shellfish poison, an increase of 21 per cent over the previous year. The unit participated in an investigation of pollution in the St. Croix River, under the auspices of the International Joint Commission on Boundary Waters; a comprehensive report summarizing the bacteriological data obtained was prepared for the commission. Investigations on the incidence and significance of bacterial indices of pollution in sewage and water were continued, with particular emphasis on aberrant coliform strains isolated by membrane filtration techniques. More than 2,000 coliform strains, and a similar number of faecal streptococci, were classified biochemically.

*Bacterial Chemistry:* Studies of the characteristics of staphylococcal exocellular products were continued. Methods have been developed which, for the first time, provide a means of obtaining in a highly purified state the two best known toxins produced by this species of bacteria. These procedures were described in two publications. A hitherto unrecognized staphylococcal lysin was described in a paper presented at the International Congress for Microbiology, Montreal, 1962.



## Biologics Control Laboratories

The duties of this section are based on the Laboratory of Hygiene's function of controlling biological drugs, such as vaccines, toxoids, sera and antibiotics, under the Canadian Food and Drugs Act and its role as a national public health laboratory. The two functions are complementary. The control work consists of a large number of routine analyses of market drugs, inspection of biological manufacturing establishments and a considerable amount of research on methods of analysis and field testing of biological drugs. These functions dovetail into public health projects, which include development of new vaccines and their testing in the field, and research in the mode of action of antibiotics, which includes chemotherapeutic studies in collaboration with local hospitals.

*Routine Control:* The manufacture of vaccines, toxoids, sera and injectable antibiotics for sale in Canada requires a Canadian Biologics Licence, which is granted only after the manufacturer's establishment has been shown to meet relatively high standards and the laboratories have been inspected and found to have acceptable manufacturing test facilities and suitably qualified personnel. Periodic inspections are carried out on every licensee to ensure that standards have been maintained. Seventy-three firms now hold a Canadian Biologics Licence. Approximately 3,000 specimens are tested per annum. Fifty-two inspections were carried out and two companies were refused a Canadian licence.

*Research:* An active research program is carried out to ensure that reasonable and effective drug regulations are elaborated. The research activities include development of methods of assay and, as well, studies on the drug's activity and use.

(a) *Biological Testing:* Identity, safety, pyrogen, potency and sterility tests are carried out routinely on licensed preparations and, in addition, sterility and pyrogen tests are carried out on non-licensed injectable drugs. A total of 872 specimens from 73 manufacturers were received and tested and 17 samples were rejected as unsatisfactory.

(b) *Antibiotics:* Antibiotics of all types — oral, injectable, sprays, ointments, salves, etc., — are checked constantly for potency. A total of 1,754 samples were received and tested. This involved the testing of 34 different individual antibiotics and a great number of combinations with more than one antibiotic, necessitating 5,640 assays. A total of 171 samples were found unsatisfactory and refused distribution on the Canadian market. This included 12 lots intended for human use and 159 lots of antibiotic sensitivity test discs.

(c) *Immunology:* In addition to the routine control testing of bacterial vaccines and tuberculins, research is being carried out on development of new bacterial vaccines. To date, staphylococcus, streptococcus, meningococcus and typhoid vaccines have been produced and are being tested or are about to be tested in the field. Studies are also being carried out in humans and test animals on antibiotic and chemotherapeutic drugs for tuberculosis and other diseases.

(d) *Other Activities:* This section is represented on W.H.O. panels for antibiotics and biological preparations, and participates in collaborative studies in establishment of international standards. In addition, work is performed with



international groups, such as the Section of Standardization of the International Association of Microbiological Societies in development of improved methods for controlling biological and pharmaceutical drugs and for closer international co-operation in the handling of these drugs.

### **Clinical Laboratories**

*Clinical Chemistry:* Comparative studies of analytical procedures used in clinical chemistry are carried out and new equipment, reagents, standards and diagnostic kits appearing on the market are evaluated. Space allotted to the Laboratory of Hygiene in the Veterans Pavilion of the Ottawa Civic Hospital has been furnished and supplied with services and a program designed to develop methods for early detection of chronic disease has begun. Consultant services in clinical chemistry are offered to hospital and public health laboratories.

Work on the "Manual of Clinical Chemistry for Hospital Laboratories" continued. A total of 1,902 English manuals and 277 French manuals have been distributed, mainly to hospital and public health laboratories.

The laboratory continued to provide hospital and other clinical laboratories in Canada with a reference cyanmethemoglobin solution and at the end of the year, there were 451 on the mailing list. A survey has been initiated to obtain data from these laboratories which will be used to establish normal values of haemoglobin in blood for all age levels and both sexes across Canada.

Evaluations of new laboratory equipment on the market and of various commercial standards, diagnostic reagents and kits have been conducted. These studies have included diagnostic preparations for determination of blood urea nitrogen (Hyland UN-Test, SUN-Pak, Urograph) and for determination of glucose in the urine (Combistix, Clinistix, Uristix, Tes-Tape, Clinitest). The efficiency of the Hycel Blood Sugar Apparatus has recently been checked. Studies to assess the accuracy of labelled values of commercial control sera and to determine the stability of the constituents under storage conditions have been continued. The best possible method of distributing this type of information more widely is being explored.

*Syphilis Serology:* The syphilis serology laboratory serves as a national reference centre. Reagents prepared and standardized at this laboratory are distributed to all provincial laboratories. A serological proficiency survey is conducted every second year. From time to time senior staff members from provincial laboratories are given refresher training and are instructed in new techniques at the Laboratory of Hygiene. Other consultant services are provided on request.

For many years guinea pig complement has been supplied to provincial laboratories by the Laboratory of Hygiene. It has become increasingly difficult to meet this commitment and the provincial directors have been asked to provide 80 per cent of their complement requirements after April 1, 1963.

During the year, 1,047 blood samples were examined by the *Treponema Pallidum* Immobilization (TPI) test as a service to the provinces and to several federal departments. Studies on the survival of virulent *T. pallidum* in synthetic media have been continued.



*Blood Group Serology:* A quality study of antiglobulin (Coombs') serum preparations available on the Canadian market has been undertaken. At present adequate procedures and criteria are not available for approving these products and this aspect of the project is receiving first consideration.

## **Virus Laboratories**

*Virus Vaccine Control:* In addition to the actual testing of commercially produced Sabin polio vaccines, the genetic analysis of poliovirus strains isolated in Canada from vaccinees and contacts who had developed clinical symptoms of poliomyelitis following large scale feeding of the vaccine in various Canadian provinces had to be made. This work was carried out at the request of the National Advisory Committee on Live Poliovirus vaccines and results of the investigation were presented at the December meetings of the Advisory Committee and the Dominion Council.

In addition, the West German Government, which had used Canadian Sabin vaccine type I during the spring of 1962, had been informed of clinical cases following vaccination, similar to those found by the Canadian investigators. The Virus Laboratories were asked to provide consultant services to the German health authorities and technical assistance in the genetic analysis of the polio strains recovered from the German vaccinees and contacts concerned.

The routine control testing of live poliovirus vaccines (Sabin) is continuing in accordance with the Canadian requirements. A total of 15 monovalent lots, submitted by Canadian, American and British manufacturers, were tested.

The control of Salk vaccines submitted by Canadian and American manufacturers is still being carried out with particular emphasis on testing for the presence of live SV 40 virus in these products. The development of an antigenicity test for Salk vaccines in roosters has been completed and results of this work have been summarized and published.

Control of measles vaccines has recently been added to the routine functions of the Virus Laboratories. Studies of these vaccines are continuing and experiments on a plaque assay test for measles virus have been completed and the results have been published.

Control of adenovirus vaccines is continuing and consists at present mainly in the reviewing of protocols submitted by the manufacturers and testing of these vaccines for extraneous virus. Antigenicity tests will be included in control procedures as soon as additional laboratory space becomes available.

In view of the ever increasing and complex responsibilities of viral vaccine control, it has become necessary to provide additional space to the Virus Laboratories so that they will be able to fulfill their obligations under the Canadian Food and Drug Act.

*Virus Diagnostic and Reference Centre:* This unit has continued to provide services for the provincial departments of health laboratories and hospitals of the national departments of health, veterans affairs and defence, as well as to hospitals in the Ottawa area. Over 720 specimens of human origin were received



from these sources for virus isolation and serological identification and about 1,700 laboratory tests were carried out with these specimens. One hundred and five strains of virus were isolated and identified from specimens received.

A major project in progress comprises a W.H.O. sponsored program of testing and standardization of international reference sera for specified members of the picorna group of viruses including Polio, ECHO and Rhino viruses which have recently been recognized as the major contributors of human disease.

*Preparation, Standardization and Distribution of Viral Diagnostic Reagents:* On request of the provincial departments of health, the Virus Laboratories have had to increase during recent years the preparation and standardization of reagents used in serodiagnosis of viral diseases. This was prompted by the difficulty of obtaining commercial products which were consistently of adequate potency, specificity and stability. The Virus Laboratories prepared and distributed diagnostic antigens for the performance of more than 17,000 tests and control antisera for over 3,000 tests.

Development of improved diagnostic antigens of the newer respiratory viruses such as the Parainfluenza, Rhino and Respiratory Syncytial groups of viruses, is continuing. Preparation of an improved adenovirus antigen which can be used on a large scale has been successfully completed.

*Cytology:* Following the addition of an experienced cytologist to the staff, a long planned section of media and tissue culture preparation and maintenance was finally established at the Virus Laboratories. Preparation of necessary materials for the "control" and "diagnostic" units can now be centralized and tissue culture cell lines be kept under continuous cytological observation in order to maintain proper standardization.

### **Zoonoses Laboratories**

Serological studies on Colorado tick fever, California encephalitis and Rocky Mountain spotted fever in wild animals collected in the Ottawa area were carried out in co-operation with the Rocky Mountain Laboratory, U.S. Public Health Service, Hamilton, Montana. Complement-fixing antibody against the spotted fever rickettsia has been demonstrated in sera of 94 per cent of the snowshoe hares and 9 per cent of the ground hogs tested. Neutralization tests for California encephalitis virus have been positive in sera of 57 per cent of snowshoe hares, 36 per cent of ground hogs, one porcupine and one raccoon. Neutralizing antibody to Colorado tick fever virus was demonstrated in 10 per cent of snowshoe hare sera, other sera tested being negative. Seven of 12 normal laboratory rabbits, placed in cages in May in the woods where serologically-positive wild animals had been collected, became seropositive for California encephalitis within the first 15 days of exposure. All of these rabbits had become seropositive by the end of the mosquito season.

Sera of present and previous workers in the Zoonoses Laboratory have been examined for neutralizing antibody to California encephalitis and Colorado tick fever viruses. One serum was positive for Colorado tick fever. It was obtained from a summer student assistant shortly after he reported for duty and thus



laboratory infection can be ruled out. One of two workers found seropositive for California encephalitis became positive while participating in the experiment involving laboratory rabbits caged in the woods.

A total of 2,146 American dog ticks were collected in an Indian reserve in Haldimand County, Ontario. Two lots were positive for spotted fever rickettsia. No evidence of Colorado tick fever or California encephalitis viruses was found in this material. Small numbers of wood ticks from six areas in British Columbia and two areas in Alberta were found negative for these viruses and spotted fever rickettsia.

The Q fever survey of bovine sera from the Eastern Townships was continued. Obtained this year through courtesy of the Health of Animals Division, Canada Department of Agriculture, were 7,117 sera bringing the total number collected to 35,724 and representing 1,834 herds. Of these, 15,230 sera (= 714 herds) have been tested by means of the capillary agglutination test giving an individual reactor rate of 5.70 per cent and a herd reactor rate of 30.39 per cent. Individual bovine milk samples were again obtained from the herd with which the human Q fever case in Richmond, P.Q., was associated. From one of these milks a strain (KWH) of Q fever rickettsia was isolated and propagated in embryonated eggs. The strain appears to be considerably more virulent for guinea pigs than the CNP strain isolated in 1961 in the Peterborough area of Ontario.

The rodent survey of the St. Lawrence Seaway communities was completed.

Immunofluorescence techniques for studies on rickettsial diseases are being developed. Improvements in screening antigens for leptospirosis are under study. This work constitutes the major interest of a post-doctoral fellow from Indonesia.

During the past year, this laboratory forwarded to provincial public health laboratories and Department of Veterans Affairs hospitals standardized diagnostic antigens sufficient to make, when diluted for use, 166,325 ml. In addition, 60 ml. of diagnostic antisera were forwarded. One paper on Q fever was published during the year and one on California encephalitis was accepted for publication. A paper on Rocky Mountain spotted fever, California encephalitis and Colorado tick fever in Canada is in the final stages of writing.

## Parasitology

The Institute of Parasitology, Macdonald College, Quebec, serves as the Parasitology Section of the Laboratory of Hygiene and provides consultant services to provincial departments of health.

*Diagnosis of Parasitic Infections:* During the past year 469 stool specimens were received, processed, examined, and reports forwarded to those concerned. Twenty-four complement fixation tests were carried out for hydatid disease; a total of 149 serum specimens from man were examined by the precipitin test, the agglutination test and, in some cases, by the complement fixation test for trichinosis.

*Distribution of Antigens:* A total of 618 ampoules of hydatid antigen for the Casoni test were distributed to hospitals, public health laboratories and private



physicians in Canada (561 last year). The increase in requests for antigen does not mean that there is an increase in the incidence of hydatidosis. It does mean that more and more of those concerned are taking the possibility of hydatidosis into consideration in their diagnoses. During the year 116 ampoules of trichina antigen were distributed to hospitals and public health laboratories.

At the request of the Surgeon General, Canadian Forces, Department of National Defence, a special course was given for four weeks in the autumn to five medical officers destined for service in the Congo, Ghana, the Middle East, and Indo-China, and to one technician.

### **Administration**

The administration section continued to provide to the laboratories stenographic and typing services, culture media, clean and sterile glassware and test animals, and to operate a central stores and workshop.

## **MEDICAL REHABILITATION**

This report marks the end of the first year's operation of the Medical Rehabilitation Division as a unit incorporating the Medical Rehabilitation and Disability Advisory Service and the Blindness Control Division, which were combined in April, 1962. The responsibilities and functions of the two original divisions were not altered by the change, and certain administrative advantages which were anticipated are being realized. Two positions on the consultant staff were vacant through a large part of the year, and this resulted in some limitation of division activities, particularly in the area of program development.

### **Medical Rehabilitation**

The division provides a national consulting and co-ordinating service in the field of medical rehabilitation and in development of medical aspects of the Disabled Persons Allowances Program.

Advice is provided regarding development of medical rehabilitation and teaching programs to hospitals, rehabilitation centres, specialized clinics, university teaching centres, voluntary organizations and public health and welfare departments at various levels of government — local, provincial and federal. Primarily the aim of the service is to stimulate and assist provincial health departments in planning and developing balanced programs whereby medical rehabilitation facilities and services will be available to every disabled child and adult in Canada who is able to benefit from treatment or retraining. More than 100 medical rehabilitation facilities have been established in Canada since inception of the Medical Rehabilitation Grant (now the Medical Rehabilitation and Crippled Children Grant) in 1953. Under this grant more than two and one half million dollars is made available annually to the provinces for development of medical rehabilitation services.

As in past years the division has continued to provide advice and assistance in expansion of medical and social services for medical rehabilitation and in



development of training programs for all members of the rehabilitation team including physicians, nurses, social workers, physical, occupational and speech therapists, prosthetists and orthotists.

The work of the consultants includes advising on projects submitted under the grants program, supervision of medical expenditures under the Disabled Persons Allowances Program, the compilation of detailed statistical and other reference material on rehabilitation facilities and on medical and technical training for presentation to organizations, committees, and conferences. Field visits are made regularly to all the provinces to study current developments in medical rehabilitation and medical aspects of the Disabled Persons Allowances Program.

A new training and recruitment pamphlet entitled "Opportunities for Speech Therapists and Audiologists in Canada" was published for free distribution and the French translation completed for publication in 1963. This is the third in a planned series of four pamphlets. The two published during the previous fiscal year in English and French deal with training in physical and occupational therapy. The fourth pamphlet will deal with social work.

The consultants took part in departmental study and planning committees dealing with such subjects as chronic illness, hospital standards, health education, national welfare grants and problems of children with congenital deformities. They also participated in meetings of the interdepartmental committee involving the Civilian Rehabilitation Branch of the Department of Labour and, as the department's permanent representative, the division chief played an active role in the work of the National Advisory Council on the Rehabilitation of Disabled Persons. Conferences, workshops and meetings dealing with various aspects of rehabilitation were attended in various parts of Canada, the United States and South America. International aspects of the field of medical rehabilitation and disability command the division's attention, and it is felt that broad benefits are derived from the international exchange of ideas and experience. Visitors from other countries were welcomed, and assistance provided in planning programs of study in Canada for students from other countries seeking broader training in the various technical and professional fields related to medical rehabilitation.

The Vocational Rehabilitation of Disabled Persons Act passed by Parliament in May, 1961 has been an important milestone in rehabilitation. By the end of the fiscal year eight provinces had signed agreements under the terms of this act for sharing of costs involved in the provision of comprehensive rehabilitation services to disabled persons who have the potential to pursue a substantially gainful occupation, or to dispense with the services of an attendant. The provisions of the act complement in many respects those of the Medical Rehabilitation and Crippled Children Grant.

Utilization of the Medical Rehabilitation and Crippled Children Grant increased slightly during 1962-63, after dipping sharply in 1960-61 due to the Hospital Insurance Program taking over in many instances, expenses formerly covered by the Medical Rehabilitation Grant, e.g., the cost of medical rehabilitation equipment for hospitals and salaries of staff engaged in provision of medical rehabilitation services, as well as special training courses for these staff members. The number and



TABLE 13  
MEDICAL REHABILITATION AND CRIPPLED CHILDREN GRANT ANALYSES, 1953-1963

	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63*
Amount available.....	\$500,000	1,000,000	979,484	998,984	961,591	964,234	1,020,948	2,568,251	2,579,447	2,604,528
Amount and.....	\$ 75,855	213,374	355,927	547,085	736,662	814,215	754,214	1,338,469	1,612,170	1,694,694
per cent approved .....	15.8%	21.3%	36.3%	54.7%	76.6%	84.4%	73.8%	52.2%	62.5%	65.1%
Amount and.....	\$ 58,222	168,679	303,419	487,724	633,397	691,612	673,399	1,159,203	1,023,269	1,211,552
per cent spent ... ..	12.1%	16.8%	30.8%	48.8%	65.8%	71.7%	65.9%	45.2%	39.7%	46.5%

\* As of March 30, 1963

range of research projects in medical rehabilitation is expanding, as well as the number of training schools offering specialized courses in the various disciplines of importance in this area. Additional prosthetics and bracemaking workshops and centres continue to develop in conjunction with rehabilitation centres and provide more efficient and convenient services to patients.

The consultants continued to advise on medical aspects of the Disabled Persons Allowances Program through visits to the provinces for discussions with provincial welfare officers and with physicians engaged in the evaluation of total and permanent disability. During the fiscal year disability allowance was granted to approximately 5,100 persons and the total number of recipients is now 50,621. Every effort is encouraged to develop uniform interpretation of the regulations and consistent standards in administration of the medical aspects of this program.

## **BLINDNESS CONTROL**

### **Blindness Allowances**

The section has continued to conduct the review of eye examination reports for the determination of medical eligibility of all applicants for Blind Persons Allowance throughout Canada. A total of 1,725 eye reports and some 8,000 reports from provincial field workers were reviewed. Notice of medical eligibility is forwarded to the provinces in the form of a certificate completed for each applicant by the reviewing officer. The section also carries out the accounting procedure through which the fees of the examining oculists are paid.

On March 31, 1963 there were 8,634 recipients of blindness allowance compared to 8,572 one year earlier. The Canadian National Institute for the Blind listed 24,385 registered blind persons in March 1962, compared to 24,117 in the preceding year.

The analysis of causes of blindness among persons granted the allowance for each fiscal year has been continued. Figures for this year's group of 865 persons are remarkably similar to those of the preceding three years. Cataracts and congenital and developmental conditions are the two leading categories of disease causing blindness. Glaucoma was responsible for 8 per cent of blindness in the group, and this figure gives further support to the belief that control measures are reducing the amount of blindness due to glaucoma. On the basis of surveys dating back to 1946, glaucoma has been considered responsible for 11 to 12 per cent of blindness in the general population.

A minor technical change was made in the definition of blindness. This did not alter the visual standard of the definition, but clarified the part relating to visual fields. The new definition has solved some of the problems encountered in determining eligibility based on defects in the field of vision.

### **Treatment Plan**

This plan has been conducted since 1948, in co-operation with nine provincial governments, and provides free treatment for the restoration of vision to recipients



of blindness allowance. The federal government pays 75 per cent of the costs and the provincial government 25 per cent. Treatment of 91 persons was completed during the year. Sixty-eight (75 per cent) of these had vision restored to better than 20/200.

Table 14

BLINDNESS TREATMENT CASES

Year	Treated	Successful	Unsuccessful
1955-56.....	83	62 (75%)	21 (25%)
1956-57.....	54	44 (81%)	10 (19%)
1957-58.....	94	68 (72%)	26 (28%)
1958-59.....	88	72 (82%)	16 (18%)
1959-60.....	105	88 (84%)	17 (16%)
1960-61.....	105	80 (76%)	25 (24%)
1961-62.....	112	90 (81%)	22 (19%)
1962-63.....	91	68 (75%)	23 (25%)

Since the plan began, 934 recipients of blindness allowance have received treatment, which was successful in 720 (78 per cent) cases.

Table 15

DISTRIBUTION OF TREATMENT CASES

	This year	Since 1948
Newfoundland .....	3	15
Prince Edward Island .....	1	4
Nova Scotia .....	5	45
New Brunswick .....	15	139
Quebec .....	32	462
Ontario .....	33	221
Manitoba .....	2	23
Saskatchewan .....	0	25
TOTAL .....	91	934

Health Grants Projects

The section has continued to provide consultant services to the Health Grants Program in the field of blindness control.

- (a) Glaucoma Clinics. Assistance was continued to 15 glaucoma clinics from coast to coast. These clinics are making a valuable contribution to the knowledge of glaucoma and its control, and to prevention of

blindness from this disease. There is growing interest in these clinics on the part of ophthalmologists, particularly those in medical teaching centres. This interest was given considerable stimulus by the First National Conference on Glaucoma which was convened by the Department of National Health and Welfare in March, 1962, and an increase in the number of glaucoma clinics in Canada is anticipated.

- (b) Health grants support has been provided for other projects in the field of blindness control. These projects include children's eye clinics, visual screening of school children, a low vision clinic, orthoptic services, a tonometer testing station, an eye bank, and the training of technical personnel associated with some of these projects.
- (c) Eye Research. Basic and clinical research directed at some of the main causes of blindness was assisted during the year. Projects include studies of glaucoma, diabetic retinopathy, retinal detachment, problems of corneal grafting and amblyopia.

### **Educational Material**

The section co-operated with Information Services in bringing up-to-date radio script material in the field of sight preservation and restoration.

The leaflet on glaucoma originally prepared in 1958 was revised, and following publication in "Canada's Health and Welfare" in April 1962, was reproduced in leaflet form. This article has been well received and is being used, particularly in glaucoma clinics, as a source of information for glaucoma patients and their families.

## **MENTAL HEALTH**

The division's purpose is to lead the attack on mental illness in Canada and to help foster mental health. The division's three major spheres of activity are the provinces, other federal departments, and other divisions of the department. Some important functions are encouragement and planning of adequate preventive and treatment services in consultation with the provinces and organizations; encouragement of research in mental health; serving as a clearing house of technical and professional information for dissemination to the public.

Under the Mental Health Grant almost \$9 million were spent to promote mental health activities. The pattern of distribution followed that of recent years: 53 per cent for mental institutions, 23 per cent for psychiatric clinics, 13 per cent for training and 10 per cent for research.

### **Planning and Extension of Mental Health Services**

A number of surveys were carried out and reports prepared to delineate existing services. These should identify possible gaps and indicate where extension or improvement in services is needed. Some of the reports and surveys were:



"Selected Mental Health Statistics — Canada 1955-60". This unique publication, prepared in co-operation with the Research and Statistics Division of this department, will show significant trends involving mental illness — mental illness that is clearly identifiable and has been definitely identified.

"Four Questions on Psychiatric Units in General Hospitals". This questionnaire survey dealt primarily with the origin, and other details of such units to acquire greater understanding of the origin and development of psychiatric facilities in Canada.

"Present State of the Open Door Policy". This consisted of a general review of provincial mental health divisions' data on the application of this policy in mental institutions within their respective provinces.

"Present Policy on Voluntary Admissions to Psychiatric Facilities". This survey, involving the provincial mental health divisions, was mainly to establish how policy on voluntary admission was evolving.

"Psychopathic Personality Survey". This constituted a survey of some 850 Canadian psychiatrists to determine the significance of the term "psychopath" among members of this profession in Canada.

The Subcommittee on Development of Services carried out a survey on "The Development of Mental Health Services in Canada". This will show the trend and growth of services during the period 1952-1962.

## **Research**

The division analyzed mental health research projects supported during past years and reviewed appraisal procedures, aiming to develop a balanced research program and placing greater emphasis on the scientific quality and relevance of studies supported under the Mental Health Grant. The roster of appraisers was extended and up-dated and an improved appraisal form was developed.

## **Public Education Program**

"Canada's Mental Health", the Division's 40-50 page monthly periodical, directed primarily to professionals in the mental health field, reached an international circulation of 12,000 in both English and French. Three special issues were published: "Mental Health and Social Welfare"; "Mental Retardation", prepared in co-operation with the Canadian Association for Retarded Children; and "Mental Health and the GP", prepared in co-operation with the College of General Practice of Canada. Each of these issues contained a specially prepared 20-page supplement of high quality technical material for use by Canadian mental health professionals for educational and teaching purposes in universities, hospitals, in-service training programs, institutes, seminars, etc. The division responded to about 1,300 separate requests for such material, involving over 9,000 individual pieces of literature.

Provincial distribution of the division's 51 mental health pamphlets, booklets and posters continued.



Initial research and preparation for a new filmstrip on ways of assisting parents and others in the training of retarded children was completed.

Displays were exhibited at various professional meetings and conferences. One display, featuring the possible mental health activities of the public health officer, was constructed and displayed at the Canadian Public Health Association meeting in Toronto.

A review of professional literature dealing with the influences of pamphlets on information and attitudes was completed and published.

### **Co-operation with Mental Health Organizations**

Liaison visits to university departments of psychiatry, psychology and social work, provincial mental health divisions, mental health organizations and mental hospitals and other psychiatric facilities were made by the professional staff of the division. Special visits were devoted to discussions concerning a questionnaire to be used in a forthcoming survey on in-patient treatment services for emotionally disturbed children.

Division officers participated in a number of conferences and annual meetings.

### **Miscellaneous Items of Interest**

Eskimos in mental hospitals were surveyed, and further study of this in collaboration with Indian and Northern Health Services resulted in the paper "Mental Health in Canada's North".

Psychological aspects of mass disaster remained a vital subject. Papers, "Preparation for Psychological Aspects of Nuclear Disaster" and "The Great Plague of 1665 as a Study in Human Reactions to Disaster", were published and lectures on this subject given at the Civil Defence College, Arnprior.

An important element, noticeable at the meetings of the Advisory Committee on Mental Health and some of its subcommittees as well as at other conferences was recognition of the need for comprehensive community mental health services and of the need for providing psychiatric services on a par with general medicine.

## **NUTRITION**

The benefits of effective nutrition programs in the less favoured parts of the world have led to an increasing appreciation of nutrition as probably the single most important environmental factor affecting health. The influence of dietary inadequacy is not so dramatically demonstrated in Canada where there is an abundant food supply. Nevertheless, nutritional problems do exist, and nutritional deficiencies continue to be diagnosed. The program of the Nutrition Division is designed to improve the health of Canadians to the extent that this can be achieved by better nutrition. The program includes research to define nutritional status of population groups, preparation of educational materials, assistance with quantity food service problems in small hospitals and other non-profit institutions, and special technical and consultant services. To a considerable extent this program is effected through provision of support for programs of provincial health departments.



## Research

The seventh food habits study in the nation-wide survey of senior citizens was carried out in Edmonton. Individual reports were sent to participants through the provincial department of health. Information from all seven studies on food habits of the aged to date is being assembled. The eighth survey was to be carried out in London, Ontario, in May, 1963.

Development of the national repository for nutrition research in Canada continued. An active interest among scientific workers in nutrition was shown by the one thousand papers and abstracts received for cataloguing. The repository is intended to provide a central reference through which nutrition scientists may review studies in progress elsewhere in Canada in their particular fields of interest.

Food consumption data for Canada for the year 1959-60 were calculated in terms of average nutrients available per person.

Small coastal communities in Newfoundland were visited to assess the problems of carrying out studies of nutritional status and to obtain information pertinent to preparing plans for such a project for consideration by the province.

## Laboratory

Laboratory services were provided for the food habits survey of senior citizens in Edmonton (165 samples, 641 tests).

In a continuation of the study on haemoglobin levels of adolescents, students were surveyed in the Wetoka Health Unit, Alberta (900 students) and the Porcupine Health Unit, Ontario (1,670 students).

The auxiliary laboratory services to provincial health departments and physicians were continued and 480 sera (1,524 tests) and 200 urines (562 tests) were analyzed. At the request of one of the provinces the service was augmented by the addition of a test for serum phenylalanine levels.

## Information and Education

A folder on "Canada's Food Guide", designed for adult education, was prepared for publication in English and French. The booklet "Healthful Eating" was brought up-to-date and the French edition was published.

"Canadian Nutrition Notes" continued to be published monthly as a source of current information for professional workers. Distributed only on request, its circulation was approximately 5,500 English and 1,700 French copies each month.

The "Reference Reading List" was published quarterly. This mimeographed publication provides professional workers with a ready reference to current scientific articles, and to other publications of nutritional interest. Approximately 1,600 English and 630 French copies were distributed by provincial health departments each quarter.

Approximately 770,750 English and 258,700 French copies of informational materials were distributed.



A fruit and vegetable poster, produced in English and French by the Canadian Horticultural Council in co-operation with the Nutrition Division, is being distributed to provincial health departments for use in nutrition education programs.

The French edition of the publication "Meals for Serving Fifty" was released for sale by the Queen's Printer.

A new 175 page manual "Meals for Serving Twenty" was prepared for publication. Written for use in small institutions, it replaces the popular but outdated manual "Institutional Meals for Twenty".

Recipe cards, for quantities providing 10, 20, 50, and 100 servings, were published quarterly for use in small institutions. Four cards were included in each issue. Three thousand English and 1,600 French sets of cards were distributed each quarter by provincial health departments.

Assistance was provided for two 5-day refresher courses for cooks in small hospitals and institutions in Manitoba.

### **Experimental Kitchen**

Recipes were tested and developed for use in publications dealing with quantity food service and in courses for cooks.

At the request of the Nova Scotia Nutrition Division, quantity recipes for school cafeterias were tested and developed.

### **Consultant and Advisory**

Advice and assistance continued to be provided, on request, to other divisions of the department, to other federal departments and to non-government and professional groups, as well as to provincial health departments. Of interest this year were: advice on catering on ships and in isolated posts; assistance with regulations concerning certification of cooks on ocean-going ships; consultation on emergency stockpiling of foods and on rations for fallout shelters; advice on survey methods for more precise evaluation of exposure to radioactivity through foods.

There is a continuing demand for expert advice regarding standards for hospital food service. It will be possible to meet this need more adequately when a qualified consultant dietitian is added to the staff.

Members of the staff participated in nutrition conferences and lectured to university students and to professional groups. Of particular significance was support and assistance given to a nutrition conference for physicians conducted jointly by Dalhousie University and the Nova Scotia Department of Health.

### **Advisory Committees**

The Canadian Council on Nutrition held a two-day meeting in June, 1962. Topics discussed included: revision of the Canadian Dietary Standard; radionuclides in foods and environmental radioactivity; Canadian food situation and outlook; addition of vitamins to foods, and nutrition education for professional groups.



TABLE 16  
NUTRITION LABORATORY SERVICES 1962-1963  
SERA

Origin	Total Specimens	Vitamin A	Carotene	Vitamin C	Total Protein	Cholesterol	Total Lipids	Haemo-globin	Phenyl-alanine	Totals
Lab. Services to Physicians and Provincial Health Departments.....	480	441	385	227	148	151	71	101	5	1,529
Old Age Survey.....	87	84	84	86	76			77		407
Haemoglobin Surveys.....	2,567							2,567		2,567
Totals.....	3,134	525	469	313	224	151	71	2,745	5	4,503

TABLE 17  
NUTRITION LABORATORY SERVICES 1962-1963  
URINE

Origin	Total Specimens	Riboflavin	Thiamine	Niacin	Vitamin C	Totals
Lab. Services to Physicians and Provincial Health Departments.....	199	181	191	183	7	562
Old Age Survey.....	78	78	78	78		234
Totals.....	277	259	269	261	7	796

Total specimens 3,416.  
Total tests 5,299.

The Dominion Provincial Nutrition Committee met in Ottawa in September, 1962. This committee of the Canadian Council on Nutrition is composed of a nutritionist from each province and the staff of the Nutrition Division. Meeting annually, it provides an effective means for co-ordinating ideas for provincial programs and indicates ways in which the federal program can best assist them.

## OCCUPATIONAL HEALTH

The Division of Occupational Health provides technical, clinical, and nursing consultant services and laboratory service to deal with problems arising from the changing economy of the country. Canada is undergoing an active period of industrialization and urbanization, and there is a growing awareness of the increase of actual and potential environmental health hazards, both to our industrial workers and general population. Provincial governments, other federal government departments, municipalities, and private industry have sought the assistance of the division during the past year. Assistance has been rendered on questions concerning air pollution, toxicity of chemicals used in industry, occupational diseases, industrial hygiene, ventilation, illumination, noise, and radiation hazards in mines.

The division has trained representatives of industry and provincial government agencies to carry out industrial hygiene surveys and air pollution surveys and has assisted in the development of employee health services. In some instances, the division has found it necessary not only to initiate investigations on environmental hazards but to carry out the complete investigation without assistance of other interested organizations, but generally the policy is to assist and guide other authorities in dealing with occupational health problems.

Three representatives of the division presented reports to The Duke of Edinburgh's Second Commonwealth Study Conference on the consequences of the changing industrial environment in the Commonwealth and Empire in May, 1962.

In addition to advice given to the federal Department of Agriculture on toxicity and labelling requirements of pesticides a division representative has been reviewing use of pesticides and studying ways of preventing hazardous exposures.

### Environmental Assessment Unit

*Air Pollution:* The division completed the co-operative study carried on with the federal Department of Agriculture, the Meteorological Branch, and the Ontario Air Pollution Control Branch and reported upon development and improvement of techniques for analysis of minute quantities of air pollutants. Smoke from vessels in the Detroit River was observed and reported to the International Joint Commission and Department of Transport. The assistance of the Meteorological Branch of the Department of Transport has made it possible to correlate pollution concentration levels with certain weather factors by means of the I.B.M. punch card system, using data gathered through the National Air Sampling Network.

A field program of research was carried out with the Meteorological Branch to determine the mode of diffusion of pollution at the site of the atomic reactor



at Douglas Point, Ontario. An aerosol containing uranine dye was released from a meteorological tower and concentrations at various distances downwind and crosswind were determined by fluorescence technique. The results are being utilized to design a stack high enough to disperse radioactive waste products discharged into the atmosphere. This dye technique is also being used in a study of pollution diffusion from the heating plant at the Montreal Road laboratories of the National Research Council.

*Purity of Divers' Air:* The first stage of this study has been completed. Work is continuing to establish standards. Another study is under way to determine safe air conditions in closed spaces.

*Fluorspar Mines, Newfoundland:* Survey of the environment has continued to ensure that radiation levels are maintained at a minimum. The Chemistry Section has completed a survey of the normal urinary fluoride excretion of the miners. As a result of the survey of background radiation levels in the mines, other provinces have become interested and a training program was conducted in Val d'Or, Quebec, to assist officers of the Quebec Metal Mines Accident Prevention Association in the establishment of radiation monitoring surveys of all their mines.

*Industrial Hygiene Surveys:* Request for these surveys by federal and provincial governments continue to be received. One of these studies involved the investigation of health hazards to customs and immigration officers from exhaust gases of vehicles passing border inspection points. A new Director of Industrial Hygiene has been appointed for the Province of Alberta, and this division has been requested to aid in carrying out an industrial hygiene survey of that province.

*Silicosis and Pneumoconiosis in Miners and Foundry Workers:* A postmortem collection of lung specimens, collected over many years, is under analysis in this division by X-ray diffraction, X-ray fluorescence, and by chemical methods for free and total silica, alumina, and a number of heavy metals. The clinical history and pathology of each case will be studied in relation to the laboratory analytical data.

*Laboratory Analysis:* The co-operative study with the Ontario Air Pollution Branch is continuing with regard to determination of concentration levels of pyrene, 3, 4-benzpyrene, and other polynuclear aromatic hydrocarbons in the atmosphere of Ontario cities and towns. Some of these hydrocarbons are also present in cigarette smoke, in the tar and soot fractions of combustion products of fuels, and in automobile and diesel exhaust fumes. The benzpyrenes have been associated statistically with the increase in incidence of lung cancer in urban populations and in heavy smokers. These hydrocarbons show substantial increase in winter, but the level in major Canadian cities is considerably less than in many other foreign, heavily-industrialized areas.

## **Biological Unit**

*Toxicology:* Studies on some hydrocarbons of the cycloparaphenic series show these solvents can be safely used as substitutes for benzene. Long-term studies of the toxicity and biotransformation of various industrial compounds, including carcinogenic substances, are continuing. New methods applicable to



blood and urine were developed for the early detection of exposure of industrial workers. Emphasis is being placed on assessment of new and more effective methods to evaluate safety of industrial chemicals. The division is particularly interested in chemicals in low concentrations to which workmen may be exposed over long periods of time, with possible resultant chronic disease effects.

An investigation of thermodecomposition products of certain plastics used for instrument panels and other purposes revealed that inhalation of the pyrolysis products might kill experimental animals. It was concluded that these products would constitute a hazard to humans under certain circumstances.

The enzyme response of laboratory animals to organophosphorus insecticide exposures is under investigation. Three scientific papers are being prepared for publication on the current work. In addition to these pesticide studies, advice has been given to the federal Department of Agriculture on toxicity of certain pesticides and recommendations for safe handling prior to registration.

A new electrochemical, continuous, microanalysis system for sulphur dioxide has been developed. It is being used to detect minute differences in concentration of sulphur dioxide in the respiratory gas streams of experimental animals subjected to inhalation experiments. The results of this work make it possible to determine the minimum exposure level at which toxic effects occur.

*Lung Disease:* A series of experiments are continuing to determine the effect of fluorspar and radiation on lung tissue. Two papers on these studies to date have been submitted for publication.

New instruments and methods have been developed to study the retention of various irritant and toxic gases resulting from inhalation exposure. The new, open-circuit, valveless, continuous air-flow respirographic technique has been developed for measuring the tidal volume, minute volume, respiratory rate and respiratory air-flow pattern simultaneously and continuously.

*Occupational Health Nursing Consultant:* The nursing consultant has carried on a program of interpretation and promotion of occupational health nursing. Assistance has been rendered to a number of industries, nurses employed in industry, provincial and municipal health departments and hospitals, on questions dealing with organization, development, and operation of employee health services. Hospitals have become particularly interested in the development of employee health services, and a manual has been prepared by the nursing consultant to be used as an aid in the development of this type of service.

A study of activities of occupational health nurses employed in industries in Ontario has been carried out, and interpretation of results of this study is being made with the assistance of the nursing consultant and the Division of Research and Statistics of this department.

## **Administrative Unit**

*Extramural Research and Teaching:* Statistical studies carried out by the senior scientific consultant of the division reveal that reliable information concerning the health of our working population is not readily available in Canada. A



specific example of the lack of information is evident in assessing the possible toxic effects of pesticides used largely in Canada in both agriculture and the home. Industrial surveys are being planned in co-operation with provincial health services to obtain necessary information. Provincial health departments are continuing to develop occupational health services which will ultimately be in a position to identify occupational health problems.

Occupational health research and training, aside from the division's program, are concentrated in Ontario and Quebec. Because occupational health hazards vary in the different provinces, there is a need for increasing research and training facilities across the country. At the present time, the greatest interest appears to be in development of air pollution investigations.

*Educational and Technical Information Services:* The division published the "Occupational Health Review" and the "Occupational Health Bulletin". These publications deal with current developments in occupational health in Canada and other countries and contain information of use to health authorities interested in this field.

Lecture material has been prepared for use in medical and nursing schools in Canada.

*Scientific Publications and Committee Activities:* Scientific publications of staff members of the division deal with a wide range of subjects. A list of titles of these publications is available upon request.

Consultants and other scientific officers of the division maintained a national and international representation on special technical and scientific committees of recognized professional associations.

## **PUBLIC HEALTH ENGINEERING**

The work of the division is directed towards protection of health as related to factors and conditions which affect or control man's environment.

The present program of the division provides for:

- (a) Administration of regulatory functions primarily encompassing:
  - (i) Common carrier sanitation, Potable Water Regulations, certification of related water supplies and the Public Works Health Act and Regulations.
  - (ii) International Joint Commission Boundary Water References.
  - (iii) Shellfish control and certification program.
- (b) Advisory services to other federal departments.
- (c) Advisory and direct service to provincial governments on request in development of pollution abatement and other related environmental programs.
- (d) Assistance in the stimulation of research into environmental problems by universities, through provincial public health engineering divisions



under health grants, and limited investigations in this field through utilization of the division's own resources.

- (e) Assistance in training programs as developed in co-operation with various provincial, federal and other agencies, i.e., university extension programs.
- (f) Laboratory services on request of other departments and provincial agencies. In addition to chemical analyses, advisory services are provided through implementation of laboratory and on site studies, relating to water and waste treatment problems. Support is also given to stream pollution abatement programs.

## 1962-63 Program

### Administration of Regulatory Functions

- (a) *Common Carrier:* Routine regulatory functions associated with common carrier activities such as railway sanitation, vessel surveillance and airline examinations were continued on a limited basis commensurate with the availability of staff for this purpose.

For compliance with the "Potable Water Regulations", vessel plans for new construction were reviewed with subsequent examinations in most instances aboard these vessels, prior to their release from shipyards to owners. During the past year there has been a marked increase in the number of vessel plans reviewed.

- (b) *Shellfish Control Program:* Continued surveillance was maintained in the shellfish control program as administered by the division with respect to certification of shellfish for export purposes. Engineering sanitary surveys of shellfish areas were made and reports submitted for detailed review of the subcommittee of the Interdepartmental Shellfish Committee.

Complete bacteriological studies of shellfish areas were carried out through the co-operation of the Laboratory of Hygiene in the use of their mobile laboratory facilities and attendant staff.

Enforcement procedures prohibiting harvesting of shellfish for export purposes were taken for all areas affected by toxicity when such levels, determined by control tests on shellfish collected from selected stations, exceeded established limits considered safe for public consumption.

- (c) *I.J.C. Boundary Water Pollution Studies:* Direct assistance was provided the International Joint Commission in surveillance maintained for control of pollution in boundary waters under reference. Four areas are presently involved:
  - (i) Lake Superior — Huron — Erie Section — Great Lakes — connecting channels.
  - (ii) Lake Erie — Lake Ontario Section — Great Lakes — connecting channels.
  - (iii) St. Croix River Basin.
  - (iv) Rainy River — Lake of the Woods.



The main contribution by the division in these co-operative studies during the past fiscal year was made in the St. Croix River Basin. An extensive pollution survey was carried out under the direction of the regional engineer for the Maritimes, with supporting technical staff including personnel from the New Brunswick Department of Health and the New Brunswick Water Authority. A comprehensive report has been prepared for presentation to the International Joint Commission.

The Rainy River — Lake of the Woods pollution reference studies were completed during the summer of 1962. The preliminary technical report of the Advisory Board was submitted to the commission in October, 1962, and the final report is now being prepared. This study was initiated three years ago and represents the most intensive investigation conducted to date in determining the many aspects and effects of pollution.

### **Advisory Services to Other Federal Departments**

Requests for advisory and direct assistance from other federal departments and agencies continue to demand increased attention.

The guidance provided covers all aspects of public health engineering, such as treatment and design of water supply systems and waste disposal facilities, evaluation of sewage treatment works, investigation of water pollution problems including industrial waste studies, etc. The laboratory facilities while limited at the present time have materially increased the opportunities for, and broadened the scope of, this service to other departments of government.

The advisory and consultant services program involved more than fifty engineering projects of which a few examples are herewith summarized.

(1) An assessment of drinking water quality at international ports and airports in Newfoundland and New Brunswick was made at the request of the World Health Organization.

(2) Evaluation study was made of sewage treatment and disposal at R.C.A.F. Station Lac St. Denis, Quebec, as requested by the Department of National Defence.

(3) At the request of the Department of Public Works, a survey of the water supply source and treatment for St. Vincent de Paul Penitentiary was conducted. Report findings are to be made available to the consulting firm engaged in preparation of recommendations to improve water treatment procedures.

(4) Direct assistance was made to Department of National Defence through visits to D.E.W. Line stations concerning sanitation, water supplies and treatment, and waste disposal.

(5) A laboratory study followed by a field investigation, primarily concerned with corrosion control, was made to correct water treatment procedures at R.C.A.F. Station, Moosonee, Ontario.

(6) Advisory services were provided the Department of Public Works in development of water supplies and waste disposal projects under their jurisdiction.



These include: R.C.M.P. establishments, nursing stations, federal and post office buildings, all in Manitoba, and the new International Crossing at Pigeon River, Ontario.

(7) Examined and assessed through control studies a "packaged" water treatment plant serving the Indian Residential School at Desmarais, Alberta. Its suitability for Indian residential schools and other institutions was recommended.

(8) Designed water supply and sewage disposal systems for Primrose Lake field quarters R.C.A.F. Station Cold Lake, Alberta, and the fluoridation system for Defence Research Station, Ralston, Alberta.

(9) Advisory services provided Department of Northern Affairs and National Resources in the operation of water treatment plants at Fort McPherson, Fort Simpson, Fort Smith and Hay River, N.W.T.

(10) Sewerage problems associated with Indian residential schools and communities were studied at the request of the Department of Citizenship and Immigration at Upper Nicola, Kamloops, Port Simpson, Lejac, Coquitlam and Bella Bella, all in British Columbia.

### **Provincial Co-operation**

Consultant services and, in a number of instances, direct assistance were provided provinces on problems of mutual interest. Here is a brief summary of major co-operative projects;

Assistance was provided the Quebec Ministry of Health and the Department of Health for British Columbia, in their shellfish control program through sanitary and bacteriological surveys of shellfish producing areas.

The engineering report on the pollution study of the Annapolis and Cornwallis Rivers, N.S., was published by this division. It was given wide distribution and was favourably received.

In Newfoundland, vocational school sites were surveyed at Bell Island, Carbonear, Seal Cove and Claronville, and recommendations made concerning the best methods of water supply and sewage disposal.

A preliminary industrial hygiene survey was conducted at a plant in Charlottetown, Prince Edward Island, where repairs were being made to marine equipment and a health hazard was believed to exist.

Surveys were conducted on operation and efficiency of waste stabilization ponds in use at O'Leary, Alberton, Kensington and Sherwood, Prince Edward Island. Also, an in-plant study was conducted at a frozen food plant in order to evaluate the degree of treatment required to remove offensive conditions in the receiving waters.

Plans and specifications for water supply and/or sewerage systems, as prepared by the consulting engineers, were reviewed for the following communities: Wellington, Miscouche, Kinkora, Sherwood and Summerside, in Prince Edward Island.



### **International Co-operation**

The past year has provided a number of opportunities for service in close liaison with the U.S. Public Health Service and other international agencies. These included: supervision of sanitary conditions and of water supplies on United States trains in transit at Montreal with regard to an international Girl Scouts Round-up; co-operation with shellfish consultants from the United States on a tour of shellfish producing areas in the Maritimes, Quebec, and British Columbia; participation by two of our regional engineers in a seminar on "Water Supply Systems Design" held in Buenos Aires, Argentina, under the sponsorship of the Pan-American Section of the World Health Organization.

### **Research**

During the year, studies have been continued on several research projects and others were initiated through our district office at Edmonton. These dealt with:

- (a) the problem of iron bacteria and its control in water supplies,
- (b) the improvement of winter operation of the existing septic tank serving the Indian Nursing Station at Fort McPherson, through use of an electric thermocouple control on the sewerline, discharging effluent to an oxidation pond,
- (c) the distribution pattern and reason for high nitrates in well supplies at Fort Chipewyan. This has stimulated interest in development of a community water supply and sewerage system.
- (d) heat losses in an 800-foot moss insulated water pipeline at Yellowknife, N.W.T.,
- (e) the performance of a sewage oxidation pond at Yellowknife for purposes of comparison with this type of economical sewage treatment used extensively in more temperate zones.

### **Publications and Training Program Assistance**

Technical papers presented before professional organizations include:

- 1. "The Aspects of Pollution of the Annapolis River in Nova Scotia".
- 2. "International Studies of Pollution in Boundary Waters".
- 3. "Sanitary Engineering Research Program in the Canadian Arctic".

The division's professional staff participated in a number of training programs as follows:

- (i) Sanitation work shops for Indians on reserves, and for several communities in the Northwest Territories. These were conducted by Indian and Northern Health Services of this department.
- (ii) Water and sewage plant operators' courses in British Columbia, and Alberta.
- (iii) Swimming pool operators' course arranged by the Alberta Department of Health.



(iv) Emergency Health Services Course at Civil Defence College, Arnprior. In addition, the division's staff prepared :

- (a) "The Emergency Water Services and Environmental Sanitation Manual" for the aforementioned C.D.C. Course.
- (b) Instructions on fluoridation of water supplies under federal government control.
- (c) Well-drilling specifications, in an attempt to achieve standard procedures by all federal departments engaged in such projects.

Also, assistance was rendered in preparation of a sanitation manual for use in workshop training courses for Indians sponsored by Indian and Northern Health Services.

### **Laboratory Section**

The division's laboratories at Ottawa and Vancouver provided an analytical and advisory service for both field offices and other government departments. Generally, the analyses are required as supporting data for investigations concerning water supply and treatment problems conducted by district engineers in their capacity as consultants to other departments. On a number of occasions, specific laboratory and field studies have been carried out to improve treatment procedures. During the fiscal year, a total of 732 samples were received for analyses.

### **Health Grants Services**

The division provided regular consultation to the Health Grants administration. A total of \$416,000 was allotted for support of environmental sanitation services. This involved projects dealing with training, research and necessary assistance required for field operations in carrying out pollution surveys and milk and food service inspections, water and sewage treatment surveillance, and other environmental control programs.

### **Trends in Public Health Engineering Programming**

Consistent with the new concept of the role to be played by this division, it is anticipated that advisory and consultant services will continue to expand with a corresponding decrease in routine services. Research programs covering specialized areas relative to water supply and sewage treatment, effective abatement and control of various industrial, organic, and other contaminants will be initiated when facilities are available.

Pollution abatement and control programs will likely demand increased attention in order to safeguard water quality in boundary and other waters if multi-purpose use of such waters is to be made in the future.

The concept of automatic monitoring for contaminants, chemical and physical parameters in pollution abatement programs will need to be considered. The continuous water quality records provided through this means, with minimum staff requirements, could be usefully and effectively employed to demonstrate the need for more efficient treatment of industrial and municipal wastes.



Increased promotion and assistance in development of adequate water and sewage facilities to serve northern communities is evidenced by the number of town planning projects prepared under contract by private engineering consulting firms and reviewed by this division during the year.

TABLE 18  
STATISTICAL SUMMARY OF FIELD WORK  
PUBLIC HEALTH ENGINEERING

	Design and Data Compil- ation	Surveys and Examin- ations	Bact. Anal. Water	Chem. Anal. Water	Bact. Anal. Milk	Bact. Anal. Ice	Sewage Effluent Samples
Vessel Sanitation.....		304	1,186		94	16	
Railway Sanitation.....		581	1,399		149	67	
Aircraft and Airport Sanitation.....		148	617	6	133	16	
Water and Ice Supply Sources for Common Carriers.....		134	503	14		57	
Shellfish Sanitation.....		54	1,209				
Co-operation with Federal Government Departments..	21	638	1,090	93	88	4	595
Co-operation with Provincial and Municipal Government Agencies.....	11	6					
Special Studies.....			44	1,109			
Total.....	32	1,865	6,048	1,231	464	160	595

RADIATION PROTECTION

Activities of the division are directed towards protection of health of radiation workers in industrial and medical establishments and programs designed to assess exposure of the general population from all sources of ionizing radiation including fallout from nuclear tests.

Accommodation

A contract was awarded May 23, 1962 for construction of a new laboratory building in Confederation Heights. Specifications call for completion of the building within eighteen months and it is expected the division will occupy it late in 1963 or early in 1964.

## Staff

Total staff establishment was increased from 53 to 65 persons. Increases were in technician positions and staff to operate mechanical tabulating equipment in the Film Monitoring Service.

## Programs

### (a) *Isotope and X-Ray Utilization and Safety*

As health and safety adviser to the Atomic Energy Control Board the division assesses health and safety aspects of applications made to the Board for licence to use radioactive material. During the year 1,191 applications were dealt with. Of these 354 were for medical purposes; 496 for research; 287 for industrial purposes and 155 for miscellaneous uses. In addition 425 amendments to existing licences were dealt with.

A regular review is carried out to ascertain the status of long-lived radioactive sources, both those obtained under licence and radium sources obtained before licensing of radium was initiated. Action is taken to ensure proper disposal of unwanted sources.

Field inspections were carried out at 230 licensed establishments and, where appropriate, recommendations were made to provide better radiation protection. Fifteen accidents involving radioactive material were investigated. Three persons were suspected of having received external exposure in excess of the recommended maximum permissible limit as a result of accidents. The degree of the over-exposure was such that it is unlikely clinical effects will be observed in any of the persons involved.

Although there are no federal regulations governing use of X-rays in Canada, there is an increasing awareness by X-ray workers of the need for adequate safeguards. Forty-three X-ray units were surveyed by request during the year.

The film monitoring service continued to grow during the year and was extended to about 14,500 workers by the end of the year. This service played an important part in detection and assessment of 8 of the 15 radiation accidents. Considerable progress has been made towards conversion of this service to semi-automatic operation. The automatic film processor was installed during the year. Punch card equipment and the automatic densitometer will be installed in the early part of the fiscal year 1963-64.

A member of the division serves as health advisor on the newly formed Atomic Energy Control Board's Advisory Committee on the Safety of Particle Accelerators.

### (b) *Radioactive Fallout*

The main part of the program (measurements of radioactivity in air, precipitation, soil, milk, wheat and bone) was continued. In this monitoring operation samples are collected with the help of the Meteorological Services Branch, Department of Transport, the Dairy Products Division, Department of Agriculture and pathologists in hospitals across Canada.



Analyses of selected samples of precipitation for specific radionuclides including strontium-89, strontium-90, caesium-137, zirconium-95, and barium-140 were initiated, to supplement the usual "total beta activity" measurements on monthly samples from 24 stations.

A new program was introduced to monitor levels of radioactive iodine-131 present in fresh whole milk. Sampling is carried out three times a week at nine cities.

In January 1963 analysis of powdered milk for strontium-90 was discontinued and in its place a similar analysis of fresh fluid milk samples from 16 stations across Canada was initiated.

Data from these programs are published regularly in a monthly report.

(c) *United Nations Program*

Samples of milk, pulse, and wheat were received from Pakistan and analyzed for strontium-90 under the United Nations co-operative study of radioactive fallout. Initial soil samples from Pakistan have been received and are being analyzed for strontium-90. Arrangements have been completed for shipment of samples from Burma and Malaya and these should be received early in the 1963-64 fiscal year.

(d) *Safety of Nuclear Reactors and Devices*

A member of the division continued to serve as health representative on the Atomic Energy Control Board's Reactor Safety Advisory Committee.

Daily air samples were collected in the neighbourhood of the McMaster University Reactor and were analyzed for total beta activity.

Environmental studies were continued near the sites of the Chalk River reactors and the NPD (Des Joachims) power reactor. In this study, regular monthly analyses of water samples from the Ottawa River were carried out. A similar study was initiated for the Douglas Point (Candu) reactor, presently under construction, to obtain pre-operational data.

(e) *Total Body Monitor*

To avoid damage to the electronic equipment in the Whole Body Counter Laboratory, located at the site of construction of the division's new laboratory building, it was necessary during the period of construction to remove the equipment from the building. This has delayed calibration studies in progress and it is expected the equipment will be moved back into the building about September 1963.



## MEDICAL SERVICES

This new directorate was created on January 1, 1962, by amalgamation of the formerly separately administered Civil Aviation Medicine Division, Civil Service Health Division, Indian Health, Northern Health, Quarantine, Immigration Medical and Sick Mariners Services, thereby grouping under one director those departmental operational medical services directly working at field level. The first Director of Medical Services appointed was Dr. P. E. Moore, formerly director of the Indian and Northern Health Services.

The new directorate has been organized basically on the regional pattern of the former Indian Health Services, the entire country being divided under executive control of five regional superintendents, each with a number of zones in charge of zone superintendents under his administration. In order to accommodate the work of Civil Aviation Medicine, Quarantine, Immigration Medical and Sick Mariners, it was necessary to create two new zones in Vancouver and Southern Ontario. It is obvious that in areas such as pre-employment examination and advising on physical and psychological standards for specific categories, the facilities of the one lend themselves readily to extension of the activities of the other. In some cases the same facilities can also extend treatment to entitled Indians or Eskimos. The advantages of amalgamating these apparently diverse services become then more apparent as conferring mutual benefit and increasing efficiency generally. There has been considerable interchange and expansion of the responsibilities of many officers, former Quarantine officers assuming wider administrative responsibilities in certain regions and zones and former Indian Health officers assuming general supervision of all branches of the work in the areas for which they are administratively responsible. The merging of formerly independent services with such a wide diversity of activities, interests and organizational patterns is not easy, but satisfactory progress has been made with a minimum of friction owing to the good will and co-operation displayed by all involved.

## INDIAN AND NORTHERN HEALTH SERVICES

### Indian Health Services

In respect to registered Indians, Medical Services has continued to offer all the services formerly given by the Indian Health Service. Arrangements are made for treatment of indigent Indians by local physicians and hospitals at public expense on a fee-for-service basis wherever possible and, where not possible, Medical Services provides direct treatment services through federal hospitals and clinics, nursing stations and health centres. Most Indians are now included under the provincial hospital insurance schemes for hospital treatment. As regards public health, still closer co-operation with provincial health services has been established and, particularly in British Columbia, provincial authorities have assumed full



responsibility for the public health nursing of more Indian communities, until one-third of British Columbia Indians are now so covered. The new experiment in training Indian health workers has been gratifyingly successful. Some of these workers have already achieved quite surprising results by arousing their compatriots' interest and involving them in effecting improvements in sanitation on their reserves. One Indian community in Ontario spontaneously opened negotiations with a local health unit for provision of public health services and at the same time organized their own insurance coverage for office medical care. The directorate undertakes to assist any Indian community to make such arrangements if they make any effort to do so. Few Indian communities can as yet afford the full expense

TABLE 19  
MEDICAL SERVICES FACILITIES

Region	Province	Facilities						
		Hospitals			Clinics	Nursing Stations		Health Centres
		No.	Rated Beds	Capacity Bassinets		No.	Rated Bed Capacity	
Eastern	Nova Scotia.....				2			2
	New Brunswick.....				1			3
	Quebec.....				4	7	28	14
	Ontario.....	2	180	9	7			10
	N.W.T.....	1	19	2	2	2	8	
	Totals.....	3	199	11	16	9	36	29
Central	Ontario.....	1	70	5	1	5	20	5
	Manitoba.....	4	218	14	6	11	44	6
	N.W.T.....					4	16	
	Totals.....	5	288	19	7	20	72	11
Sask.	Saskatchewan.....	2	154	13	3	2	8	10
Foothills	Alberta.....	4	132	23	3	3	12	11
	Yukon.....	1	120	30	1	2	8	4
	N.W.T.....	1	100	12	4	9	39	2
	Totals.....	6	352	65	8	14	55	17
Pacific	British Columbia .....	3	527	8	6			12
	Total.....	19	1,520	116	40	45	183	79



involved, but whatever contribution they can make can be supplemented by Medical Services subject to the proposed arrangement meeting with approval.

The health of the Indian population as a whole presents much the same picture as last year. The birth rate continues to rise and infant mortality, though still more than three times that of the non-Indian community, continues to fall slowly. The chief causes of death amongst Indians, continue to be diseases of infants and accidents. Natural increase of the Indian population is now over 3.47 per cent per annum and for the first time since the advent of the white man, Indians now number more than they did at that time, having increased in number from about 90,000 at the turn of the century to over 200,000 today. Tuberculosis is still about ten times more prevalent amongst them than amongst the rest of the population and in 1962, has shown a somewhat disturbing trend to some increase in reactivation of inactive cases, particularly in the central prairie provinces. Decreasing numbers of new cases, however, are being discovered annually despite continued intensive search and, with the current intensification of the B. C. G. vaccination program, it is hoped to establish satisfactory control. The increase in old cases breaking down is probably a reflection of the stress of recent lowered economic conditions in the country as a whole which always bear hardest on the less affluent strata of society.

### **Northern Health Service**

In respect to the Northern Territories, Medical Services assumes the role of "Provincial Department of Health", and supervises both the hospital insurance plan and public health programs. Through Medical Services, the department assumes medical welfare financial responsibility for medical expenses of indigent Indians and Eskimos residing in the Arctic while the territorial governments finance other medical indigents. In 1962, the Yukon territorial government adopted a policy of providing a free cancer diagnostic and treatment service and introduced a medical referee system of screening hospital insurance accounts. Emergency medical services have been organized along the main highways and there has been an increase in hospital facilities. Accidents are common in the northern regions and are responsible for 55 per cent of the total mortality from all causes over the age of one year in the Yukon.

## **CIVIL AVIATION MEDICINE**

The division for 16 years, has provided advice to the Department of Transport Air Services, other government departments and associated agencies on medical problems relating to health, safety and comfort of aircrew, groundcrew and airline passengers.

The division assumed its new role as a component of the Directorate of Medical Services through which it was provided with a number of facilities heretofore not readily available. The directorate assumed executive responsibility for operation of offices of the regional medical officers and the amalgamation permitted the appointment of full-time departmental officers to act as regional medical



officers for Civil Aviation Medicine and other divisions. These full-time departmental medical officers replaced the former private physicians engaged on a part-time basis. To permit decentralization to fulfill the role for which it was originally established, it has been the recommendation of the directorate and the Department of Transport's Air Services that additional responsibility should be delegated to regional medical officers. Results are encouraging and development of an improved aviation medical service is evident.

The prime responsibility of providing advice regarding medical examinations and assessments of civil aviation personnel to the Department of Transport's Air Services continued, with approximately 20,000 medical examinations carried out by civil aviation medical examiners. Findings of the examiners, and assessments of the regional medical officers continued to be channelled to the division's headquarters for inclusion in the electronic data processing procedures instituted during the year.

Medical advice on physical standards for aviation personnel provided by the division to the Department of Transport resulted in the publication of the Department of Transport "Physical Standards for Civil Aviation Personnel Licensing, Second Edition". This was a major step in bringing Canadian medical requirements in line with Medical Standards and Recommended Practices of the International Civil Aviation Organization. This publication is being followed by a revision of the division's publication entitled "The Handbook for Civil Aviation Medicine". This will describe recommended medical examination procedures and professional and administrative responsibilities of medical examiners and regional medical officers.

The recommendation of the division's consultants, that arose from examination and review of medically contentious cases, continued to place upon this division's headquarters responsibility for determining if an individual may be considered physically fit for the responsibilities and environment of civil aviation personnel in Canada. The consulting services consist of seven regional medical consultant boards, other designated consultants in the field, and consultants at headquarters who may be departmental or specialists in private practice.

The division's educational program as it applies to the civil aviation medical examiner service continued. Regional conferences for medical examiners were held in two regions.

The division and its officers are being requested to provide advice more frequently on medical aspects of aircraft accident investigation. Although this activity touches upon the highly specialized field of forensic medicine, considerable progress has been made in providing advice and service to the Department of Transport's accident investigation teams.

Supersonic commercial jet air travel appears to be approaching rapidly and to keep abreast of advances in medical science liaison with Canadian and international groups involved in aerospace medicine is continuing to be developed. The division sends its representative to domestic and international conferences.

Interest has been expressed in the development of a more extensive program for medical research in civil aviation in Canada.



## CIVIL SERVICE HEALTH

The division has completed its sixteenth year of operation and its first within the newly formed Directorate of Medical Services.

### Administration

The headquarters in No. 3 Temporary Building continues to administer three broad classes of service. First, a basic advisory and consultant service is rendered to all government departments on employee health and welfare matters. Secondly, through twenty-six full-time and four part-time health units a nursing counsellor service is provided in whole or in part to some 37,700 federal government employees within the Ottawa area. Thirdly, through its Medical Centre at Headquarters an advisory, diagnostic and emergency medical service is afforded to almost 40,000 federal government employees also in the Ottawa area. To a lesser extent, similar essential services required either by statute or requested by departments for employees outside Ottawa are arranged utilizing resources of Medical Services, Department of Veterans Affairs or, as necessary, private physicians on a fee-for-service basis.

### Medical Centre Services

Referrals from health units, physical examinations required by statute under the Public Service Superannuation Act, Foreign Service Regulations, Isolated Posts Regulations, and pre-employment examinations requested by departments because of the nature or location of the work involved together with examinations for special employee groups constitute the bulk of the routine work conducted at the Medical Centre. Special employee groups, apart from the ever-increasing number of employees and dependents proceeding to isolated posts or overseas missions, include employees assigned to summer field work, employees engaged in hazardous occupations or in handling radioactive materials, periodic executive health examinations for an increasing number of government departments, and special eye examinations for employees whose work entails a high degree of visual acuity.

The clinical and advisory services afforded the Departments of External Affairs and Trade and Commerce increase yearly as new overseas missions become established or existing ones increase staff requirements. Further, the division has assumed responsibility for medical arrangements required of assignees and their dependents posted abroad under a variety of government aid programs administered by the External Aid Office. During the previous three years hardship conditions at some 27 posts in Asia, Eastern Europe, the Middle East, Africa and Latin America were inspected and reports submitted on factors relating to climate, isolation, local service conditions, health and medical care facilities. These reports together with the Post Rating Form, Rating Guide and Weighting Factors employed in the assessment of conditions at unhealthy posts have been most helpful this past year in establishing adequate post differential allowances at newly established posts.

The divisional psychiatrist and psychologist have both been hard pressed to



meet their commitments. These consultant services have again been in increasing demand. The psychologist, in particular, has a long waiting list and efforts are being made to obtain an assistant psychologist or psychometrist. Nursing counsellors continue to be the main source of referral. Under the direction of the psychologist they are referring a greater number of cases where personality problems appear to be the primary cause in maladjustment. With the trend to higher educational standards, vocational and career guidance has resulted in more employees seeking help in attaining their job goals. The older employee, often with a feeling of stagnation as to his future, seeks help from the nursing counsellor and the psychologist in an effort to find a solution to his problem. The psychologist continues to work closely with the psychiatrist and clinicians in assessment of departmental and pre-employment referrals and assessment of emotional suitability of foreign service employees. The psychiatrist continues to perform a dual role. Apart from holding some 537 consultations, he has further developed the educational aspects of the mental health program for federal government employees through formal lectures and group discussions with appropriate departmental authorities. He has also encouraged personnel officers to discuss more directly with him employee emotional health problems. Finally, the psychiatrist, working closely with departmental personnel officers, has continued to develop and give leadership to the program for combatting alcoholism in the public service. This program emphasizes early recognition, treatment and rehabilitation. An increasing number of employees with drinking problems have been rehabilitated and the success of the program has encouraged government departments to seek similar help for problem cases outside Ottawa.

Six thousand two hundred and two immunizations of various types were administered to 2,529 individuals, largely to foreign service personnel and their dependents proceeding abroad or to isolated regions. The increase over the previous year is attributed in the main to the number of vaccinations against poliomyelitis. These are in addition to those administered during the mass booster program conducted during the fall as a follow-up to the previous year's initial large scale poliomyelitis vaccination program.

The Certificate Review Section moved to new quarters in the Blackburn Building early in the fiscal year. Medical officers continue to give medical direction to the work of this section on a monthly rotating basis. This section reviewed and processed more than 114,300 certificates of disability for duty and 8,700 physical examination record forms. Furthermore, the section arranged for some 600 medical examinations outside Ottawa.

The annual statistical report on "Illness in the Civil Service", which has been published by the Dominion Bureau of Statistics for many years in co-operation with this division, will be discontinued after the statistics relating to the calendar year 1962 have been produced. In its place the Bureau, at the request of Treasury Board, will prepare statistics of an administrative nature showing patterns of use on both casual and certified sick leave in the public service. Although diagnostic information will not be included, they will provide more extensive information than in the past on the rates of sickness absenteeism specified for age, sex, classification, length of service and other characteristics.



## Health Unit Services

In April the services provided National Research Council employees at the health unit in the new Communications Building, Riverside Drive, were increased to full-time. In June the health unit in the Blackburn Building, which had remained closed since the move of the Post Office Department to Riverside Drive, was reopened on a half-time basis to serve employees of the Department of Forestry. Towards the end of the fiscal year a small part-time unit was established in the Mortimer Building to serve largely Department of National Defence employees in that building as well as in the adjacent Ogilvy Building. Finally, the part-time unit at Plouffe Park was enlarged and renovated with afternoon service being given to some 400 employees of the Department of Public Works. The nurse/employee ratio is approximately one per 800 employees compared to that of the previous year of one per 750.

Of the approximately 38,000 employees receiving nursing counsellor service, some 5,600 receive emergency service only, being too far distant from health unit locations to receive the full-range of benefits including induction visits, return-to-work visits, health teaching and counselling. Based on a force of some 32,000 employees receiving full service, the index of participation is calculated at 53.5. This participation index is substantially higher for departments which adhere to the policy of having their employees make return-to-work visits to the health unit following absences on account of illness. Comparable figures for regional health units outside Ottawa, transferred to Medical Services during the course of the year, will not be available until revisions of daily and monthly health unit records have been completed and uniform procedures for reporting to regions and headquarters have been adopted.

## Special Activities

One of the year's highlights has been the authorization by Cabinet in April 1962, subject to Treasury Board approval, for the extension of this division's operations by the establishment of a nursing counsellor service through health units, similar to the pattern already established in Ottawa, to large centres and areas having substantial concentrations of federal government employees. At the close of the fiscal year Treasury Board had granted approval for limited extension and appropriate measures have been implemented for this department to take over control of existing health unit or nursing services formerly operated by the Departments of National Defence and National Revenue. Additionally, the Board approved a plan which is going forward for the establishment of two new units, one at Edmonton (Federal Building), and a second at Montreal International Airport (Dorval). The immediate result of this first phase in the extension of this division's program has been to provide nursing counsellor service to some 17,000 civil servants outside Ottawa under considerably more adequate medical direction and nursing supervision. The ultimate objective will be to develop and broaden these health unit services in depth, raising them to a level commensurate with those afforded federal government employees in Ottawa.

With the extension of nursing counsellor services to employees outside Ottawa it has become necessary to adopt uniform policies and procedures for all



health units. Accordingly, the "Nursing Counsellor's Manual" which has served solely for the nursing counsellor staff of the Civil Service Health Division in Ottawa, has been reviewed and is now designed to serve a similar role for the staff of regional health units. Similarly, the daily and monthly health unit reports and employee health unit records have been revised to provide uniformity of records for health units within and outside Ottawa.

In connection with the extension program a three-day indoctrination conference was held at division headquarters in Ottawa, March 1963, to acquaint senior regional and zone medical and nursing staff with the functions, objectives and policies of the Civil Service Health Division. While these senior officers will be

Table 20

## MEDICAL CENTRE STATISTICS 1962-63

Number of Visits		
Total .....		9,203
First visit .....	4,163	
Repeat visit .....	5,040	
Visits by Sex		
Total .....		9,203
Male .....	6,440	
Female .....	2,763	
Analysis of Visits		
Physical Examinations .....		2,854
Pre-employment, periodic, P.S.S.A. ....	764	
Foreign service, isolated duty, postings, etc. ....	851	
Referrals — voluntary, department, health unit, etc. ....	1,239	
Consultations, Interviews, etc. ....		6,284
Psychological .....	906	
Psychiatric .....	535	
Special, eye, X-ray, immunization .....	4,843	
Accidents .....		65
Industrial .....	11	
Non-industrial .....	54	
Immunizations		
Total Number of Employees Immunized .....		2,529
Total Immunizations .....		6,202
Smallpox .....	1,491	
T.A.B.T. ....	1,663	
T.A.B. ....	506	
Cholera .....	474	
Typhus .....	232	
Yellow Fever .....	722	
Polio (Salk) .....	1,025	
Other .....	89	
Disposal		
Total .....		9,203
Returned to work .....	9,165	
Sent home .....	38	
Referred to Family Physician .....		31
Total Laboratory Procedures .....		4,477
X-Ray		
Total .....		3,773
Chest .....	2,187	
Chest (photoroentgen unit) .....	1,033	
Other .....	553	



responsible for local direction, administration and nursing supervision of regional health units, the division chief will be responsible for advising on program control, planning and development of services.

As a follow-up to the large scale vaccination program against poliomyelitis for federal government employees in the Ottawa district concluded the previous year, the division in the fall of 1962 undertook to provide fourth or booster inoculations to those who had previously received the primary series of three inoculations. Twelve clinics in all were held at which 14,293 employees received booster doses.

The Canadian Cancer Society through its health education medium the "Little Red Door" recently completed a mission to Ottawa. The nursing counsellor staff acted as liaison between this mobile unit and government personnel officers enabling information and literature to be distributed to over 10,000 interested civil servants.

TABLE 21

RETIREMENTS FROM SERVICE — ACCORDING TO DISABILITY  
1962-1963

Male 212 — Female 74 — Total 286

Cause of Disability	Age Groups					Total
	Under 40	40 to 44	45 to 49	50 to 54	55 to 59	
Infective and Parasitic.....	0	0	1	1	6	8
Neoplasms.....	0	6	8	8	9	31
Allergic, Endocrine, Metabolic, Nutritional.....	0	2	1	3	9	15
Mental Psychoneurotic Personality.....	5	9	10	14	12	50
Nervous Systems and Sense Organs.....	4	6	5	11	18	44
Circulatory.....	2	4	9	18	36	69
Respiratory.....	0	0	2	5	6	13
Digestive.....	0	1	2	5	6	14
Genito-Urinary .....	1	0	1	1	1	4
Skin and Cellular.....	1	0	0	0	0	1
Bones and Organs of Movement.....	2	1	7	7	7	24
Congenital Malformation.....	2	0	0	0	0	2
Symptoms and Ill-Defined .....	1	1	0	1	3	6
Accidents and Results of Old Injuries.....	0	2	0	0	3	5
Total.....	18	32	46	74	116	286

Table 22

OTTAWA HEALTH UNIT LOCATIONS

<i>Health Unit No.</i>	<i>Locations</i>	<i>Total Personnel Supervised by Units</i>
1	No. 2 Temporary Building .....	2,221
2	Citizenship Building .....	1,132
3	No. 8 Temporary Building .....	1,060
4	Trade and Commerce Building .....	908
5	Metcalf Building .....	818
6	"C" Building, National Defence .....	2,994
6A*	Mortimer Building (Tues. & Thurs. p.m.'s) .....	342
7	Geological Building, Booth Street .....	1,633
7A*	Plouffe Park (afternoons only) .....	419
8	Jackson Building Annex .....	2,206
9	Hunter Building .....	1,168
10	No. 6 Temporary Building .....	636
11	D.V.A. Memorial Building .....	1,367
12	Bureau of Statistics .....	4,533
13	Victoria Island .....	690
14	Connaught Building .....	814
15*	Blackburn Building (afternoons only) .....	1,235
16	Daly Building .....	1,699
17	National Research Council (Sussex Drive) .....	702
18	National Research Council (Montreal Road) .....	1,430
18A*	National Research Council, Radio Building, Montreal Road (mornings only) .....	362
19	Defence Research Board (Shirley Bay) .....	673
20	Confederation Building .....	2,079
21	No. 13 Cottage Row, Building No. 10, Rockcliffe .....	1,432
22	No. 5 Temporary Building .....	742
23	75 St. Patrick Street (Old Printing Bureau) .....	503
24	Sir Charles Tupper Building (Riverside Drive) .....	1,060
25	Neatby Memorial Building (Carling Avenue) .....	1,218
26	Sir Alexander Campbell Building (Riverside Drive) .....	1,042
27	National Research Council Telecommunication Building, Heron Road .....	576
Total .....		37,694

\*Part-time

Table 23

REGIONAL HEALTH UNIT LOCATIONS

<i>Region</i>	<i>Locations</i>	<i>Total Personnel Supervised</i>
Pacific	Esquimalt, HMC Dockyard ..	3,050
Foothills	Edmonton, Federal Bldg. ....	1,150
	Lancaster Park (Namao), No. 7 Supply Depot RCAF .....	385
Eastern	Downsview, Supply Depot RCAF .....	1,000
	Toronto, MacKenzie Bldg. ....	1,924
	Montreal, Federal Bldg. ....	1,802
	Ville LaSalle, Supply Depot RCN .....	700
	Moncton, N.B., No. 5 Supply Depot RCAF .....	600
	Sydney, N.S., Pt. Edward Naval Base .....	650
	Bedford Basin, Amm. Depot RCN .....	300
	Shearwater, RCN Air Station .....	600
Halifax, HMC Dockyard .....		4,700
Total .....		16,861



TABLE 24  
HEALTH UNIT STATISTICS 1962-1963

	Total	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
Number of Personnel Under Supervision.....		37,618	35,287	38,295	38,626	38,490	38,349	37,744	37,644	36,286	36,940	37,671	37,694
Number of Health Units in Operation.....		27	27	27	27	27	27	27	27	27	27	27	27
Number of Visits													
Total.....	206,668	16,015	19,971	17,752	16,435	16,173	16,031	19,765	17,307	14,406	18,366	16,947	17,500
First visit.....	153,408	11,690	14,874	13,099	12,012	11,930	11,983	14,972	12,661	10,698	13,814	12,656	13,019
Repeat visit.....	53,260	4,325	5,097	4,653	4,423	4,243	4,048	4,793	4,646	3,708	4,552	4,291	4,481
Visits by Sex													
Total.....	206,668	16,015	19,971	17,752	16,435	16,173	16,031	19,765	17,307	14,406	18,366	16,947	17,500
Males.....	102,189	7,856	9,814	8,375	7,895	7,860	7,915	9,706	8,599	7,098	9,295	8,701	9,075
Females.....	104,479	8,159	10,157	9,377	8,540	8,313	8,116	10,059	8,708	7,308	9,071	8,246	8,425
Nature of Visits													
Total.....	206,668	16,015	19,971	17,752	16,435	16,173	16,031	19,765	17,307	14,406	18,366	16,947	17,500
Illness.....	85,149	6,987	7,958	7,133	6,774	6,633	6,573	7,852	7,199	5,879	7,464	7,074	7,623
Accident.....	16,124	1,269	1,660	1,577	1,532	1,441	1,215	1,362	1,351	1,140	1,306	1,170	1,101
Consultations.....	15,224	1,442	1,833	1,783	1,304	1,121	1,198	1,224	1,217	791	1,224	1,042	1,045
Return-to-work visits.....	90,171	6,317	8,520	7,259	6,825	6,978	7,045	9,327	7,540	6,596	8,372	7,661	7,731
Classification of First Visits													
Total.....	153,408	11,690	14,874	13,099	12,012	11,930	11,983	14,972	12,661	10,698	13,814	12,656	13,019
Respiratory.....	45,870	3,461	3,752	2,164	2,083	2,153	3,632	5,806	3,871	3,341	4,815	4,758	6,034
Digestive.....	26,488	1,815	2,544	2,751	2,658	2,806	2,093	2,253	2,139	1,990	2,167	1,851	1,421
Skin and cellular.....	9,640	663	1,101	985	1,003	931	724	804	794	581	741	648	665
Menstrual disorders.....	6,527	544	683	725	650	570	482	564	523	421	541	446	378
Emotional disorders.....	2,748	212	255	261	217	231	190	265	244	214	248	216	195
Contagious diseases.....	134	16	16	14	7	3	11	5	9	7	13	16	17
Accidents—non-industrial.....	7,558	542	773	825	768	722	547	614	575	537	620	552	483
Accidents—industrial.....	5,158	446	504	450	411	407	408	420	435	351	477	448	401
Ill-defined and all others.....	49,285	3,991	5,246	4,924	4,215	4,107	3,896	4,241	4,071	3,256	4,192	3,721	3,425
Disposal													
Total.....	206,668	16,015	19,971	17,752	16,435	16,173	16,031	19,765	17,307	14,406	18,366	16,947	17,500
Sent home.....	5,576	452	490	434	381	386	427	571	439	309	510	540	637
Returned to work.....	201,092	15,563	19,481	17,318	16,054	15,787	15,604	19,194	16,868	14,097	17,856	16,407	16,863
Referrals													
Total.....	10,879	879	1,035	1,040	978	903	846	955	845	631	1,091	878	798
Referred to medical centre.....	1,897	161	181	184	163	128	160	148	140	121	207	171	133
Referred to family physician.....	7,710	627	718	720	670	656	596	704	607	434	785	624	569
Referred to community agencies.....	1,272	91	136	136	145	119	90	103	98	76	99	83	96



## QUARANTINE SERVICE

The essential purpose of the Quarantine Act and Regulations is the provision of maximum security against importation into Canada of the major quarantinable diseases.

The major quarantinable diseases are: smallpox, cholera, plague, yellow fever, typhus and relapsing fever. Protection against smallpox, cholera and yellow fever is based upon immunity induced by recent vaccination. Sanitary measures applicable to food and water supplies assist in control of cholera and typhoid fever. In view of the role of insect vectors and their hosts in the transmission of yellow fever, plague, typhus and relapsing fever, measures are directed towards extermination of vectors and their hosts.

During the year under review there were 9,245 aircraft and 4,985 ships subjected to quarantine inspection and 1,067,869 persons inspected on arrival. Regular reports of presence or absence of quarantinable diseases were received from departmental medical officers in the United Kingdom, in fourteen countries of Western Europe and in Hong Kong. Close liaison was maintained with provincial departments of health and the United States Public Health Service. Information received at divisional headquarters from these sources and from the World Health Organization was made available to quarantine stations throughout Canada.

### Smallpox

In 1962, 77,636 cases of smallpox were reported to the World Health Organization. As reporting from some areas is incomplete the true global incidence of the disease is unknown. Nine persons suffering from smallpox entered Western Europe and gave rise to 101 secondary cases. Special precautions were taken to prevent transmission of the disease to Canada.

On August 12, 1962, a fifteen-year-old boy suffering from smallpox entered Canada at the port of Fort Erie. He had flown with his family from Sao Paulo, Brazil, to New York, and thence travelled by train to Toronto. He possessed a certificate of vaccination against smallpox on a form printed and stamped by the Government of Brazil. This certificate was accepted at New York International Airport.

Five days later a secondary rise in fever led to consultation with the municipal medical officer of health. A presumptive diagnosis of smallpox was made and provincial and federal health authorities were immediately informed. Preliminary laboratory studies supported the diagnosis and the patient was isolated.

Immediate contacts were placed under quarantine and vaccinated. The boy's mother and two sisters were traced to Three Hills, Alberta. The World Health Organization, the United States Public Health Service and the medical officer of health at Drumheller, Alberta, were informed by cable and telephone. A radio broadcast advised all persons who have been passengers on the train from New York to Toronto to report to their physician for vaccination. The municipal health unit made a door to door canvas of the area which the patient had visited.



A detailed inquiry was made into the movements of the patient's family and known contacts were located. Appeals were made through the press to unidentified contacts. The train crew and government officers who had boarded the train were individually traced. The United States Public Health Service instituted measures to locate passengers who had travelled on the same aircraft to New York.

Detailed studies at the Virus Laboratory confirmed the diagnosis of alastrim. No secondary cases occurred.

The experience of the past year emphasizes the difficulties experienced by the quarantine service in tracing contacts of an airline passenger, since airlines do not keep a record of the destination addresses of their passengers.

Smallpox surveillance orders were issued in respect of 1,230 persons arriving in Canada. There were 9,652 persons vaccinated at ports of entry.

### **Cholera**

For the second consecutive year a major outbreak of cholera in the Far East necessitated surveillance of persons arriving from infected areas and, for a brief time, restrictions of importation of certain perishable foodstuffs. Cholera surveillance orders were issued for 848 persons.

### **Plague**

Measures to prevent importation of plague into Canada are directed towards vectors of the disease and their rodent hosts. On a world-wide basis, ships and aircraft are routinely inspected for evidence of rats and rat harbourage at not less than six-month intervals. Recommendations are made for the elimination or reduction of rat harbourage areas. When necessary, vessels are fumigated or such measures as trapping or poisoning are applied. Ships and aircraft may be fumigated at Halifax, Saint John, N.B., Quebec, Montreal, Toronto, Vancouver and Victoria. Fumigation certificates issued at these ports are recognized throughout the world and are in accordance with the International Sanitary Regulations. Inspections only are carried out at Sydney, St. John's, Nfld., and at nine other smaller ports, all of which may issue certificates of exemption from fumigation. In 1962, 1,420 cases of plague were reported to the World Health Organization. The largest outbreaks occurred in Africa, Asia and South America.

### **Yellow Fever**

Eighteen yellow fever vaccinating centres are maintained in major cities across the country. In view of the perishable nature of yellow fever vaccine, special precautions in handling and storage are necessary and vaccination is, therefore, restricted to official centres. There were 7,415 vaccinations performed. Canada, except for southerly portions of Ontario and Nova Scotia in summer months is not a yellow fever receptive zone. Nevertheless, as a measure of co-operation with the United States Public Health Service, control is maintained of susceptible persons proceeding via Canada from yellow fever infected or endemic zones to receptive areas of the United States.

**Typhus and Relapsing Fevers**

Large reservoirs of typhus and relapsing fevers persist in certain areas of the world and while these diseases have not recently been of major significance in North America, vigilance must be maintained against their importation.

**Typhoid Fever**

Although typhoid fever is not classed as a major quarantinable disease, it was considered necessary during the recent large-scale outbreak of typhoid in Europe, to notify provincial health departments of names and addresses of persons arriving in Canada from infected areas. This procedure was followed for some weeks.



TABLE 25

## SHIPS INSPECTED—UNORGANIZED PORTS

Station	Vessels Inspected	Personnel Inspected			Total Personnel Inspected
		Crew	Passengers	Stowaways	
Argentia, Nfld.....	1	16			16
Baddeck, N.S.....	9	267			267
Baie Verte, Nfld.....	1	42			42
Bathurst, N.B.....	17	578			578
Bay Roberts, Nfld.....	2	44			44
Bay Bulls, Nfld.....	2	56			56
Bell Island, Nfld.....	45	1,845	33	1	1,879
Botwood, Nfld.....	29	1,068	9		1,077
Bridgewater, N.S.....	10	267	14		281
Campbellton, N.B.....	3	97	4		101
Canso, N.S.....	2	56			56
Caraquel, N.B.....	2	34			34
Carbonnear, Nfld.....	1	12	2		14
Chandler, P.Q.....	1	31			31
Charlottetown, P.E.I.....	5	141			141
Chatham, N.B.....	13	368			368
Churchill, Man.....	52	1,929	14		1,943
Cornerbrook, Nfld.....	32	1,278	19		1,297
County Harbour, N.S.....	1	32			32
Dalhousie, N.B.....	29	1,239	43		1,282
Digby, N.S.....	3	76			76
Gaspé, P.Q.....	2	110			110
Harbour Grace, Nfld.....	43	1,045	63		1,108
Hare Bay, Nfld.....	13	383		4	387
Holyrood, Nfld.....	10	449			449
Indian Bay, Nfld.....	21	600	1		601
Kitimat, B.C.....	39	1,570	50		1,620
Lewisporte, Nfld.....	1	21			21
Little Narrows, N.S.....	1	39			39
Liverpool, N.S.....	8	322	1		323
Louisbourg, N.S.....	4	117	2		119
Manuels, Nfld.....	1	25			25
Matane, P.Q.....	3	39	4	3	46
Moncton, N.B.....	4	105			105
Montague, P.E.I.....	6	168			168
Newcastle, N.B.....	4	110			110
Ocean Falls, B.C.....	7	262	7		269
Parrsboro, N.S.....	5	142			142
Port Alberni, B.C.....	35	1,373			1,373
Port Alice, B.C.....	17	696	3		699
Port Edward, B.C.....	1	40			40
Port Hawkesbury, N.S.....	21	773	3		776
Port McNeill, B.C.....	3	143			143
Powell River, B.C.....	1	37			37
Prince Rupert, B.C.....	30	1,183	1		1,184
Pugwash, N.S.....	1	23			23
Quatsino, B.C.....	19	818	2		820
Richibucto, N.B.....	19	474	3		477
Souris, P.E.I.....	1	32			32
Stephenville, Nfld.....	3	132	7		139
Summerside, P.E.I.....	6	163			163
Tahsis, B.C.....	10	309			309
Tommy's Arm, Nfld.....	5	136		2	138
Toquart Bay, B.C.....	25	1,065			1,065
Weymouth, N.S.....	6	165			165
Windsor, N.S.....	5	126	1		127
Zeballos, B.C.....	11	495			495
Totals.....	651	23,166	286	10	23,462

TABLE 26

## INSPECTION OF AIRCRAFT SUBJECT TO QUARANTINE

Airport	No. of Aircraft	No. of Crew	No. of Passengers	Total Persons
Ancienne Lorette, P.Q. ....	9	77	592	669
Bagotville, P.Q. ....	3	52	12	64
Calgary, Alta. ....	23	194	1,454	1,648
Dorval, P.Q. ....	3,495	33,983	227,487	261,470
Edmonton, Alta., including Namao Airport ( )	169 (4)	1,602 (35)	10,957 (2)	12,559 (37)
Fredericton, N.B. ....	4	50	326	376
Frobisher, N.W.T. ....	18	140	847	987
Gander, Nfld. ....	2,160	18,129	125,138	143,267
Goose Bay, Nfld. ....	558	4,359	23,520	27,879
Greenwood, N.S. ....	78	1,297	205	1,502
Halifax, N.S. ....	296	2,622	19,265	21,887
London, Ont. ....	1	3	7	10
Malton, Ont. ....	1,123	9,768	74,610	84,378
Moncton, N.B. ....	17	160	890	1,050
Ottawa, Ont. ....	89	1,022	2,249	3,271
Seven Islands, P.Q. ....	2	12		12
Stephenville, Nfld. ....	5	46	436	482
Summerside, P.E.I. ....	59	868	32	900
Sydney, N.S. ....	26	200	1,714	1,914
St. John's, Nfld. ....	9	80	117	197
Trenton, Ont. ....	396	4,354	15,165	19,519
Vancouver, B.C. ....	489	4,517	31,950	36,467
Windsor, Ont. ....	62	459	2,428	2,887
Winnipeg, Man. ....	154	1,539	12,773	14,312
Totals. ....	9,245	85,533	552,174	637,707



TABLE 27  
SHIPS BOARDED BY QUARANTINE OFFICERS,  
ORGANIZED QUARANTINE STATIONS

Station	Vessels Inspected	Personnel Inspected				Port Totals
		Crew	Passengers	Stowaways	Others	
Halifax, N. S.....	657	47,548	42,361	2		89,911
Sydney, N. S.....	101	3,627	6	1		3,634
Saint John, N.B.....	383	15,651	1,516	2	6	17,175
St. John's, Nfld.....	342	18,010	263	1	1	18,275
Quebec, P.Q.....	2,658	146,338	71,095	9	22	217,464
Victoria, B.C.....	844	44,880	15,346	7	8	60,241
Totals.....	4,985	276,054	130,587	22	37	406,700

TABLE 28  
CONTROL OF RODENTS ON VESSELS

Port	Vessels Inspected Fumigated and Deratting Certificates Issued	Vessels Inspected and Exemption Certificates Issued	Vessels Inspected and Remanded or Time Extended	Vessels Inspected and Certificates Endorsed or Related Action	Total Vessels Inspected	Rats Recovered
St. John's, Nfld.....		16			16	
Sydney, N.S.....		14			14	
Halifax, N.S.....	1	45	48	6	100	1
Saint John, N.B.....		55			55	
Baie Comeau, P.Q.....		5			5	
Montreal, P.Q.....		117	12	15	144	
Port Alfred, P.Q.....	1	29			30	16
Quebec, P.Q.....		18		1	19	
Rimouski, P.Q.....		1			1	
Seven Islands, P.Q.....		3			3	
Three Rivers, P.Q.....		6			6	
Toronto, Ont.....		12		7	19	
Vancouver, B.C.....	3	180	7	615	805	107
Victoria, B.C.....		28		112	140	
Totals.....	5	529	67	756	1,357	124

## LEPROSY

Since 1960, examination, isolation and treatment of persons suffering from leprosy have been arranged in their home neighbourhood. Where possible treatment is given by local physicians and precautions against transmission to others are prescribed by local health departments acting under direction of provincial health authorities. Use may be made of compulsory isolation under the Leprosy Act in cases which cannot be treated locally or which remain a persistent danger to others, especially child contacts.

The courts may order committal to the leprosarium at Tracadie, New Brunswick, for examination, diagnosis, isolation or treatment. A voluntary consent may be signed by the patient. Under present policy commitment is only used as a last resort where health conditions in the home make treatment and isolation difficult, where co-operation of patient or family cannot be obtained, or where serious reactions to treatment or complications make specialized facilities necessary. During the year under review no persons were committed, but four persons remaining from the previous year were under treatment and were still in hospital at the year's end.

## IMMIGRATION MEDICAL SERVICES

The Immigration Act requires those seeking admission to Canada to undergo a mental and physical examination. It also provides for treatment of certain classes of persons after arrival. The Department of National Health and Welfare Act assigns to the department the responsibility of providing these services. The work of the Immigration Medical Service, therefore, has a dual statutory authority.

The Immigration Act prohibits the entry to Canada of persons who are mentally defective, insane, psychopaths, or who suffer from certain forms of infectious disease. It excludes as immigrants those who have previously been insane or who are epileptics. The service attempts to detect these persons while they are still abroad.

Immigrants who suffer from physical defects are also excluded, unless other factors — skills, family or other support — provide a reasonable assurance of their successful integration into Canadian life. The service, in addition to uncovering physical defects, advises the Department of Citizenship and Immigration of the significance, in relation to the individual's future, of any impairment which may be found.

In certain circumstances departmental officers in Europe examine prospective immigrants by physical standards required by the specific occupation to which they are destined. This service is particularly applicable to the mining industry and the teaching profession. They also assist Canadian hospitals and universities by interviewing candidates for appointments, scholarships and post-graduate training. An introduction has been made to a program of selection by medical



officers abroad, of medical applicants for employment in other branches of the department.

Medical officers-in-charge in most western European capitals serve as attaches to the Canadian embassies. In all centres, Canadian physicians maintain close contact with local health authorities so that medical information may be passed to the embassy or to the Ottawa headquarters of the division. This information is of particular significance as it pertains to international quarantinable diseases.

The service is composed of foreign service, Canadian and preliminary screening sections. The operation is administered by a headquarters section which is also responsible for liaison with provincial and local health authorities in medical matters pertaining to immigrants.

Although there was a significant increase in the number of medical examinations conducted in Europe and the British Isles during the past fiscal year, the number of Canadian medical officers serving in Europe was reduced from 46 to 36. This reduction followed decreases in the number of examinations during the previous year. It was accomplished in part, by the part-time operation of offices in Stuttgart, Munich, Berlin and Hamburg and by the withdrawal of full-time Canadian physicians from Helsinki and Bristol. The Helsinki establishment is now conducted on a part-time basis by a local examiner. The Bristol office is attended four days a week by a local physician and one day each week by a departmental officer stationed in London.

Remote areas in the British Isles, Scandinavia and Finland are served by local examiners whose work is under direct supervision of the officer-in-charge of the nearest Canadian establishment. Athens and Vienna have, in keeping with the territorial organization established by the Department of Citizenship and Immigration, been designated area offices. The medical officers-in-charge have supervisory duties related to the work of local examiners in adjacent countries and will, from time to time, engage in team operations within those countries.

Departmental offices have operated on a full-time basis in Belfast, Glasgow, Liverpool, Leeds, London, Copenhagen, The Hague, Brussels, Paris, Cologne, Berne, Vienna, Lisbon, Rome, Athens and Hong Kong. Part-time operations have been conducted by Canadian and local physicians at Bristol, Stuttgart, Munich, Hamburg, Berlin and Helsinki. Team operations have taken place in Cairo, Latina, Madrid, Malta, Venice, Amiens, Bordeaux, Lyon, Marseille, Mulhouse, Metz, Rennes, Toulouse, the West Indies and British Guiana.

The integration of Medical Services has found its best expression in Europe in the operation of the health unit in the London office. The unit has rendered extensive service to civil servants in London, to the armed services through assistance in the processing of recruits and to the department at large by the examination of candidates for employment.

The Canadian section of the service is responsible for the final medical examination and for treatment, if indicated, of all persons subject to immigration authority. It is also responsible with the headquarters section for periodic ex-



amination and review of reports pertaining to those who have been admitted to Canada as non-immigrants for treatment purposes.

The Preliminary Medical Screening Section assesses the medical evidence for persons applying to enter Canada from countries in which there are no Canadian medical officers or roster doctors. The screening is intended to give reasonable assurance to applicants that they will be able to meet medical requirements on arrival at a Canadian port. Furthermore, it assists in preventing introduction of communicable diseases into Canada.

Medical examinations are conducted in the country of origin. Medical reports and X-ray films of the chest are forwarded for review to the Preliminary Medical Screening Section at Ottawa. The Department of Citizenship and Immigration is then advised whether the individual appears capable of meeting Canadian medical standards.

The section also deals with medical evidence submitted by non-immigrant students and others from abroad, and persons already in Canada applying for landed immigrant status or for extension of temporary non-immigrant status.

Table 29

# IMMIGRATION MEDICAL SERVICE

## SUMMARY OF ACTIVITIES

### Canada:

Immigrants medically examined and/or inspected .....	76,234
Non-immigrants medically examined and/or inspected .....	176,416
Certifications as "prohibited" under Sec. 5 (a) (b) and (i) of the Immigration Act .....	291
Certifications as physically defective under Sec. 5 (c) .....	3,858

### Overseas:

Prospective emigrants medically examined .....	83,810
British Isles .....	30,475
Continent of Europe .....	50,023
Asia .....	3,312
Certifications as "prohibited" under Sec. 5 (a) (b) (i) and (s) of the Immigration Act .....	2,272
Certifications as physically defective under Sec. 5 (c) .....	11,829

### West Indies and South America\*:

Prospective emigrants medically examined .....	360
Certifications as "prohibited" under Sec. 5 (b) of the Immigration Act .....	27
Certifications as physically defective under Sec. 5 (c) .....	23

### All Other Countries:

Medically prescreened at Ottawa .....	27,550
Certifications as "prohibited" under Sec. 5 (a) (b) and (i) .....	484
Certifications as physically defective under Sec. 5 (c) .....	4,882

---

\*Team work.



TABLE 30

## DETAILS OF EXAMINATIONS (OVERSEAS)

	Total Persons Examined	Persons Examined on Re-Application*
By Canadian Medical Officers in British Isles.....	28,966	2,763
By Roster Doctors in British Isles.....	1,509	108
By Canadian Medical Officers on the Continent.....	49,072	8,341
By Roster Doctors on the Continent.....	951	147
By Canadian Medical Officer in Asia.....	1,838	594
By Roster Doctors in Asia.....	1,474	342
By Canadian Medical Officer in West Indies and South America**.....	360	
Total Persons Examined 1962-63.....	84,170	12,295
Total Persons Examined 1961-62.....	71,696	11,781
British Isles:		
By Canadian Medical Officers:		
Belfast.....	1,965	163
Bristol.....	1,473	149
Glasgow.....	7,039	771
Leeds.....	3,041	231
Liverpool.....	3,413	397
London.....	12,035	1,052
By Roster Doctors:		
Belfast Area.....	4	
Bristol Area.....	123	3
Dublin Area.....	563	35
Eire Area.....	111	17
Glasgow Area.....	222	19
Leeds Area.....	179	9
Liverpool Area.....	98	9
London Area.....	209	16
Continent:		
By Canadian Medical Officers:		
Athens.....	5,875	854
Berlin.....	571	83
Berne.....	1,032	42
Brussels.....	1,138	159
Cologne.....	3,858	522
Copenhagen.....	710	36
The Hague.....	2,259	413
Hamburg.....	1,704	167
Helsinki.....	245	47
Lisbon.....	2,272	489
Munich.....	1,125	147
Paris (including Amiens, Bordeaux, Lyon, Marseille, Mulhouse, Metz, Rennes and Toulouse).....	6,145	736
Rome.....	17,613	4,250
Stuttgart.....	1,713	200
Vienna.....	1,011	125
Schemes:		
Cairo.....	823	37
Latina.....	468	9
Madrid.....	228	14
Malta.....	256	11
Venice.....	26	
By Roster Doctors:		
Finland.....	64	9
France.....	6	
Malta.....	327	89
Norway.....	323	32
Sweden.....	231	17
Asia:		
By Canadian Medical Officer:		
Hong Kong.....	1,838	594
By Roster Doctors:		
India.....	1,429	342
Pakistan.....	45	

TABLE 30 [Continued]

DETAILS OF EXAMINATIONS (OVERSEAS)

West Indies and South America **:		
By Canadian Medical Officer:		
British Guiana.....	63	
St. Vincent.....	7	
Barbadoes.....	10	
Trinidad.....	17	
Bermuda.....	7	
Grenada.....	19	
Jamaica.....	237	
Totals.....	84,170	12,295

\*Persons examined on re-application include those who have been previously medically investigated and whose records are still available.

\*\*Team work.

Table 31

IMMIGRATION MEDICAL EXAMINATIONS AND INSPECTIONS IN CANADA

Location	Immigrants	Non-Immigrants
Gander, Nfld. ....	1,004	4,312
St. John's, Nfld. ....	75	167
Halifax, N.S. ....	10,135	870
Halifax Airport, N.S. ....	739	2,580
Sydney, N.S. ....	30	25
Saint John, N.B. ....	184	190
Montreal, P.Q. ....	2,182	1,654
Quebec, P.Q. ....	15,140	13,874
Dorval, P.Q. ....	23,413	43,427
Malton, Ont. ....	4,356	17,487
Toronto, Ont. ....	2,015	—
Fort Erie and Outports, Ont. ....	1,727	23,312
Niagara Falls and Outports, Ont. ....	573	46
Winnipeg, Man. ....	306	—
Winnipeg Airport, Man. ....	814	2,503
Vancouver, B.C. ....	1,290	12,253
Vancouver Airport, B.C. ....	305	3,352
Victoria, B.C. ....	215	1,552
Others .....	11,731	48,812
Total .....	76,234	176,416



TABLE 32

CERTIFICATIONS UNDER SECTION 5 OF THE IMMIGRATION ACT

Certifications Under:	Canada	British Isles		Continent of Europe		Asia		Canada	West Indies and South America	Total
	I.M.S. Offices	Examined by Can. M.O.'s	Examined by Roster Drs.	Examined by Can. M.O.'s	Examined by Roster Drs.	Examined by Can. M.O.	Examined by Roster Drs.	Prescreened at Ottawa	Examined by Can. M.O.*	
SS (a) Mental Diseases and Defects.....	76	65		94		2		62		299
SS (b) Chronic Infectious Diseases.....	214	102	2	1,074	1	618	312	422	27	2,772
SS (c) Physical Defects.....	3,858	4,601	278	6,439	85	145	281	4,882	23	20,592
SS (i) Chronic Alcoholism.....	1	1		1						3
	4,149	4,769	280	7,608	86	765	593	5,366	50	23,666

\*Team work.

TABLE 33

CASES PRESCREENED AT OTTAWA SHOWING COUNTRY OF ORIGIN

Country	Total Cases	Examined	Re-Examined	Passed	Certifications under Sec. 5			Total Certifications
					"A"	"B"	"C"	
Algeria.....	128	108	20	93		3	24	27
Argentina.....	186	122	64	148	1		49	50
Australia.....	1,156	1,088	68	1,024	1	2	151	154
Azores.....	1,995	1,467	528	1,799	2	17	184	203
Bahrein Island.....	5	5		6				
Bermuda.....	33	30	3	33				
Bolivia.....	11	8	3	7			8	8
Brazil.....	205	182	23	159		11	40	51
British Guiana.....	797	745	52	713	2	9	96	107
British West Indies.....	2,260	1,981	279	1,998	2	54	138	194
Bulgaria.....	8	6	2	3			9	9
Burma.....	14	13	1	12				
Canada.....	4,029	3,582	447	3,497	20	25	692	737
Central Africa.....	285	265	20	219		19	31	50
Central America.....	29	29		25			4	4
Ceylon.....	40	36	4	34		1	7	8
Chile.....	40	38	2	38		1	1	2
China.....	189	175	14	148		6	38	44
Colombia.....	73	64	9	60		1	14	15
Cyprus.....	33	30	3	29			4	4
Czechoslovakia.....	57	43	14	32		2	37	39
Dutch Guiana.....	2	2		1			1	1
Dutch West Indies.....	10	10		8		1	1	2
Ecuador.....	9	7	2	9				
Egypt.....	888	877	11	752	1	7	168	176
Ethiopia.....	11	11		11				
Fiji Islands.....	31	31		11		1	2	3
Gibraltar.....	10	10		9				
Greenland.....	2	2		1				
Guadeloupe.....	2	2		1		1		1
Hungary.....	823	365	458	575	1	14	342	357
Iceland.....	7	7		3			7	7
India.....	1	1		1				
Indo-China.....	65	57	8	59		6	3	9
Indonesia.....	85	79	6	69		6	9	15
Iran.....	24	16	8	20			10	10
Iraq.....	9	9		8			1	1
Israel.....	853	763	90	686		11	184	195
Japan.....	445	423	22	373		5	78	83
Jordan.....	11	10	1	10		1		1
Korea.....	34	29	5	28		3	3	6
Lebanon.....	504	440	64	378	1	37	143	181
Liberia.....	1	1					1	1
Libya.....	6	4	2	3				
Madeira.....	68	46	22	56		2	3	5
Malaya.....	118	113	5	101		3	9	12
Malta.....	1	1		1				
Mauritius.....	7	7		5		2		2
Mexico.....	118	115	3	111	1	1	6	8
Morocco.....	273	242	31	192		5	69	74
Mozambique.....	3	3						
New Zealand.....	250	238	12	219			34	34
Pakistan.....	127	113	14	108		6	10	16
Paraguay.....	52	42	10	38		1	17	18
Peru.....	50	49	1	47		1	1	2
Philippines.....	141	130	11	128		2	9	11
Poland.....	1,875	1,436	439	1,281	6	79	760	845
Roumania.....	220	111	109	154		2	101	103
Russia.....	81	67	14	42		6	85	91
Saudi-Arabia.....	3	3		3				
Sierra Leone.....	12	12		10		1	1	2
South Africa.....	434	385	49	386		1	52	53
Spain.....	280	204	76	240		6	45	51
St. Pierre de Miquelon.....	1	1		1				
Syria.....	10	10		8			1	1
Thailand.....	27	26	1	24			2	2
Tonga Island.....	5	5		2				
Tunisia.....	11	11		1			5	5
Turkey.....	146	135	11	122		4	21	25
Uruguay.....	56	40	16	53			7	7
United States of America.....	6,376	6,105	271	5,406	23	20	1,011	1,054
Venezuela.....	339	295	44	300		5	29	34
West Indies Group.....	119	112	7	102		8	11	19
Yugoslavia.....	941	764	177	804	1	23	113	137
Totals 1962-63.....	27,550	23,994	3,556	23,038	62	422	4,882	5,366
Totals 1961-62.....	26,314	22,616	3,698	21,672	38	499	4,247	4,784



SICK MARINERS SERVICE

Part V of the Canada Shipping Act, statutory authority for the Sick Mariners Service, provides a compulsory levy of 2¢ per net register ton on all vessels arriving in certain provinces from foreign ports or from another province. This duty is collected not more than three times in a calendar year. The initial payment can be no less than \$2.00 and the total due in any calendar year is a sum calculated at 6¢ per net register ton, or \$2.00, whichever is the greater. Payment on behalf of fishing vessels of Canadian registry must be made before the first fishing voyage in the calendar year is undertaken.

Free treatment is provided for a period up to one year to crew members of vessels which have paid the levy. Entitlement is determined by Collectors of Customs. Under agreements between the federal and provincial governments, seamen are not excluded from hospital insurance benefits and, consequently, hospital charges other than coinsurance are now paid only for those not covered by a provincial hospital insurance plan.

The number of fishing vessels paying dues on a voluntary basis in 1962 increased to 7,561 from 6,877 in 1961 and ships paying dues on a compulsory basis increased from 3,264 to 3,321.

An increase of \$12,641 was recorded in dues paid during 1962 making total revenue \$552,014. Expenditures decreased by \$26,929 to \$906,690. Treatment of crew members of fishing vessels of Canadian registry was responsible for almost the entire operating deficit of \$354,199 which showed a decrease of \$40,046 from \$394,246 in 1961. The deficit recorded in the treatment of crew

TABLE 34  
SICK MARINERS SERVICE, CALENDAR YEAR 1962

Classification of Vessel	Revenue	Expenditure	Deficit	Deficit Expressed as Percentage of Revenue
Foreign-going.....	\$527,996	\$581,649	\$ 53,652	10%
Coasting.....	7,992	5,277	2,715 (Surplus)	34% (Surplus)
Fishing.....	16,025	317,988	301,963	1,885%
Additional Expenditure not Classified as to Type of Vessel.....		1,298	1,298	
Total.....	\$552,013	\$906,212	\$354,198	64%
Government (not paying S.M. Dues) treatment provided under Authority of P.C. 1955-4/483 T.B. 484135		\$ 476		

members of foreign-going vessels rose from \$11,199 in 1961 to \$53,652 in 1962 while there was a surplus of \$2,715 recorded in connection with the treatment of crews of coastwise vessels.

Sick mariners clinics staffed by departmental medical officers are operated in Sydney and Halifax, N.S., Saint John, N.B., Quebec and Montreal, P.Q., Vancouver and Victoria, B.C. Treatment at other ports is by part-time salaried physicians or on a fee-for-service basis. The total number of hospitals treating seamen during the year was 146 while the number of physicians, consultants and specialists involved was 796. A total of 39,315 seamen received treatment compared with 36,184 the previous year and of this number 2,240 foreign seamen received hospital care. The total number of crew members eligible for treatment was 151,482.



Table 35

## DISEASES AND INJURIES TREATED

Fiscal Year 1962-1963

Tuberculosis of respiratory system .....	42
Tuberculosis, other forms .....	4
Syphilis and its sequelae .....	80
Gonococcal infection .....	963
Dysentery all forms .....	29
Other infective disease commonly arising in intestinal tract .....	4
Certain diseases common among children:	
Chicken pox .....	2
Measles .....	10
Mumps .....	11
Scarlet fever .....	1
Malaria .....	4
Diseases due to helminths .....	76
All other diseases classified as infective and parasitic .....	810
Benign neoplasms .....	275
Malignant neoplasms and others .....	119
Allergic disorders .....	778
Thyroid gland .....	25
Diabetes mellitus .....	143
Avitaminosis .....	157
Anaemias .....	544
Psychoneuroses and psychoses .....	687
Vascular lesions .....	28
Diseases of eyes .....	666
Diseases of ear and mastoid process .....	1,933
Rheumatic fever .....	19
Chronic rheumatic heart disease .....	11
Arteriosclerotic and degenerative heart .....	725
Hypertensive disease .....	471
Diseases of veins .....	1,102
Acute naso-pharyngitis and hypertrophy of tonsils and adenoids .....	3,207
Influenza .....	1,046
Pneumonia .....	485
Bronchitis .....	1,671
All other respiratory disease .....	1,873
Diseases of stomach and duodenum .....	2,055
Appendicitis .....	279
Hernia of abdominal cavity .....	263
Diarrhoea and enteritis .....	385
Diseases of gall bladder and bile duct .....	287
Other diseases of digestive system .....	8,637
Nephritis and nephrosis .....	118
Diseases of genital organs (male) .....	1,930
Boils, abscesses, cellulitis and other skin infections .....	2,792
Other diseases of the skin .....	1,275
Arthritis and rheumatism .....	1,441
Diseases of bones and other organs of movement .....	793
Congenital malformations .....	21
Other specified and ill-defined diseases .....	3,221
Occupational accidents and occupational poisonings .....	1,234
Accidents and poisonings, not specified as occupational .....	3,112
	<hr/>
	45,844

## DOMINION COUNCIL OF HEALTH

The Dominion Council of Health advises the Minister on matters relating to the health of the people of Canada. It also plays a co-ordinating role in respect to the health programs of the provinces and between the federal and provincial health authorities.

The Council met twice during the past fiscal year. In accordance with a decision reached at the spring meeting, an Advisory Committee on Viral Hepatitis was appointed to investigate and make recommendations to the Council in respect to the increasing incidence of infectious hepatitis and the various problems connected with both serum hepatitis and infectious hepatitis. The Advisory Committee's first report was presented at the Council's fall meeting in November. Other matters of particular interest during the year included meetings of the National Technical Advisory Committee on Live Poliovirus Vaccines which provided expert advice on the use of these products in Canada; public health aspects of pesticides used in agriculture; problems in relation to the sale of meat; the measurement of radioactive fallout from nuclear weapons testing; the development of programs designed to provide for the care and treatment of children suffering from congenital malformations; the adequate reporting of all congenital anomalies; amendments to the Regulations under the Food and Drug Act for the purpose of providing increased protection against the introduction of potentially harmful drugs.



## WELFARE BRANCH

### INTRODUCTION

Activities of the Welfare Branch were extended, and continuous co-operation and liaison was maintained with other federal departments, the provinces and non-government agencies.

The Welfare Grant Program was commenced with an initial allocation of \$250,000. A variety of projects were supported through it, designed to develop general welfare services and to assist training of welfare personnel and research in welfare matters which, in the first year, was largely directed toward improvement in the organization, co-ordination and staffing of services and in the development of new preventive services. It is intended that \$500,000 be allocated to the program in 1962-63, with the amount increasing annually by \$500,000 until 1966-67, when the total would be \$2.5 million.

Studies were continued on different aspects of social security problems, with particular reference to income security measures for older persons.

Social assistance coverage, particularly aid to the provinces under the Unemployment Assistance Act, continued to receive intense study; the rise in expenditures under the Unemployment Assistance Program, which had been 78 per cent in 1961-62, levelled to 4.8 per cent for the year.

Payments to the provinces, under the Old Age Assistance, Disabled Persons and Blind Persons Allowances Programs, rose somewhat, due to the rise in benefit levels from \$55 to \$65 during the year. The rise in the number of recipients was relatively small and largely confined to old age assistance recipients, of whom there were an increase of about 5,000 persons.

The Emergency Welfare Services of the department were strengthened with the appointment of regional representatives in four provinces and of additional bilingual headquarters staff. A survey of emergency welfare resources was carried out across Canada.

The department continued to play an important part in international welfare activities and, in particular, in providing assistance and advice to UN agencies. The Deputy Minister of Welfare served as chairman at the fourteenth Session of the Social Commission and was elected to the Program and Budget Committees of UNICEF as well as serving on the Executive Board. Other members of the department contributed to a variety of international welfare and social security activities.

The Fitness and Amateur Sport Program completed its first full year of operation, in which the sum of \$1 million was extended to aid Canadian participation in international and national competition and sport and fitness organizations, physical education training, fitness research and the promotion of training and information services. Approximately half this expenditure was through direct federal grants, the remainder through grants to the provinces.



## INTERNATIONAL WELFARE

Co-operation with and assistance to the United Nations and related agencies was greatly increased during the year; with the designation of the 1960's as the United Nations Development Decade, and the increased emphasis being placed on the social aspects of development, this work is rapidly increasing in scope and significance.

The Deputy Minister of Welfare represented Canada at the fourteenth session of the United Nations Social Commission in 1962, and was elected chairman for the session.

As in 1961, the Commission gave considerable attention to ways and means of encouraging a more balanced approach to problems of economic and social development. This reflected the rapid growth of feeling, both within and outside the United Nations, that previous international development efforts have given insufficient recognition to the need for social progress. In resolutions forwarded to the Economic and Social Council, the Commission accordingly recommended a number of specific steps designed to improve and intensify United Nations activities in support of national and international planning for balanced development, and in the social field generally.

The Commission also considered a special expert report on housing and urban development which emphasized the importance of inadequate housing and urban facilities as one of the most serious social problems facing the world, particularly in the less-developed regions; as a result of the Commission's recommendations, a United Nations Committee on Housing, Building and Planning was set up to report through the Commission to ECOSOC; it held its first meeting early in 1963, and passed a number of significant resolutions. The president of Central Mortgage and Housing Corporation served as chairman of the Committee at its first session.

Arrangements were also made for an expert appraisal of United Nations experience in the field of community development, and a report on the organization and administration of social services was scrutinized and commented upon. Both these areas of activity have been given high priority by the Commission because of their importance for social development as a whole. As a result of the recommendation regarding community development an ad hoc expert group was established on which the Director of the University of Saskatchewan Centre for Community Studies served as rapporteur; the Commission at its fifteenth session recommended to ECOSOC that the report of this group be referred for information to all member governments.

The Director of the Unemployment Assistance Division, with a staff member of the International Welfare Division as advisor, represented Canada at the annual policy meeting of the Executive Board of UNICEF and at the meeting of the UNICEF Programme Committee which preceded it in June 1962. As third largest over-all contributor to UNICEF, Canada plays an important part, and has a special interest in this agency.



At this meeting consideration was given to the role of UNICEF in the United Nations Development Decade. As in the Social Commission, the necessity of giving increased attention to the social sectors of development was stressed. Within this context, it was agreed that the need to plan for the development of children and youth, who represent the adult generation of the future, is of primary importance. The Executive Board stated its readiness to give all possible aid for this purpose from UNICEF resources, and called upon national governments, as well as aid-giving agencies of all kinds, to initiate and intensify assistance to children and young people.

At the December 1962 meeting of the UNICEF Executive Board, Canada was represented by the Deputy Minister of Welfare. On this occasion, Canada was elected to both the Programme and Budgetary Committees of the Board. A distinctive feature of this meeting was the allocation of nearly \$26 million to UNICEF assistance; this constituted a record amount, as did the total of over \$44 million for 1962 as a whole.

Significant reports and studies emerging from these bodies were circulated by the International Welfare Division of the Department to a broad range of public and private welfare organizations in Canada. Reports for UN agencies on Canadian welfare matters and replies to UN agency questionnaires were prepared by the Research and Statistics Division at the request of the United Nations. The department also took part in the work of an inter-departmental committee dealing with the United Nations Commission on Human Rights, to which Canada was elected in 1962.

The Director of the Family Allowances and Old Age Security Division attended the 46th session of the International Labour Organization at Geneva in 1962 as an adviser to the Canadian delegation and was the government representative on the Committee which completed the drafting of the Convention on Equality of Treatment between Nationals and Non-Nationals in Social Security, which was unanimously adopted at the session. The Director of the International Welfare Division had acted as adviser on the preliminary draft of the Convention carried out at the 45th session in 1961.

The Assistant Director of Family Allowances and Old Age Security represented the department at the International Conference on Social Work, held in Brazil, in 1962. The theme of this conference was Rural and Urban Community Development.

The Deputy Minister, as a member of the International Labour Organization's Committee of Experts on Social Security, served as Chairman of the meeting of the Committee held at Geneva in December 1962 to assess and redefine ILO policy in the field of social security. Further assistance was given to the International Social Security Association, which the department joined early in 1962.

A comprehensive study was commenced of the experience of Canadians who had served in developing countries on technical assistance assignments in the social field. The study also received assistance through a Canada Council Grant and through advice and consultation from Brandeis University.



In 1962 and 1963, officers of the International Welfare Division acted in an advisory capacity to the National Committee on Canada's Participation in Social Development Abroad. The purpose of the committee, which was sponsored by the Canadian Welfare Council, the Overseas Institute of Canada and the Canadian Committee of the International Conference on Social Work, was to examine sources of private Canadian assistance to developing countries and to discuss methods of increasing the effectiveness of such aid. The International Welfare Division and the Research and Statistics Division also gave staff assistance to the fact-finding group set up by the main Committee.

Early in 1963, the Director of the International Welfare Division served as a panelist in a UNICEF Seminar, sponsored in New York by the Canadian and U.S. associations of professional social workers. With a staff member as adviser, the Director of the Division also represented Canada at the fifteenth session of the Social Commission, in 1963.

The results of this meeting, which considered reports on the world social situation, housing, land reform and community development, will be reviewed in the next annual report of the department.

Continued co-operation was extended to the External Aid Office in technical assistance matters; the Director of the International Welfare Division served on the Scholarship Advisory Panel of the External Aid Office.

## **WELFARE GRANTS**

The Welfare Grants program was commenced late in 1962 with strong support from the provincial governments and from national and local voluntary welfare agencies. The allocation for the first year of the program was \$250,000. Sixty-two projects were approved and claims amounting to \$151,967 were paid. Scholarship and fellowship awards to individuals totalled \$5,207.

### **General Welfare and Professional Training**

A variety of projects in addition to those for services for phocomeliac children, were approved under the general welfare services provision. One project assisted in strengthening adoption services. A Social Research and Planning Division was established in a provincial department of welfare, under another project to assist local communities with welfare problems, with emphasis being placed on a preventive approach. In another provincial department of welfare a project was undertaken to provide consultant service to field staff employed in general assistance and rehabilitation.

Provincial departments were assisted in a variety of projects to assist training of welfare personnel. Bursaries were provided to students with satisfactory standing who required financial assistance to attend schools of social work; most had just completed undergraduate study and were proceeding with graduate studies in social work. Training grants were also provided to persons employed in provincial and municipal welfare departments, including corrections and probation staff,



and in voluntary welfare agencies, who are granted educational leave as part of staff development plans. A number of short-term courses were supported for welfare workers who had not graduated from a School of Social Work, and for supervisors, senior administrators and other welfare personnel.

Only two fellowship awards were made, both to assist persons in doctoral studies in social work, one was assisted by means of a scholarship to obtain a Master of Social Work degree. These awards are given to persons of demonstrated high ability. It is expected that ten fellowships and twenty scholarships will be offered in the coming fiscal year.

With the other provisions of the welfare grants program giving impetus to enrolment in schools of social work, it was essential that these schools be assisted to employ faculty and field instructors to teach the additional students. Four schools — the Maritime School in Halifax and the schools at the Universities of Toronto, Manitoba and British Columbia — were helped in the hiring of additional staffs, in the main, field instructors, an area of critical need.

### **Welfare Research**

Priority is given under the welfare Research Grant to aid research projects holding promise of significantly assisting the organization, co-ordination and staffing of welfare services and of developing new services focused on the prevention of welfare problems and dependency. Eight projects were assisted. Assistance to them was on a non-matching basis, although the departments and agencies involved contributed additional financial support. In addition to those provincial governments, voluntary agencies on both the local and national level were helped.

Projects included one related to the evaluation of a provincial training school program, for the purpose of developing new methods and techniques to strengthen the treatment and rehabilitation program for young offenders. Another was directed toward the setting up of an area social service centre to provide social casework and group work, health and community development services to a group of multi-problem families; under this project evaluation will be made of the treatment program and of the processes of integrating a wide variety of services under one administration along with a study in depth of the genetic, biological, psychiatric and social factors associated with multi-problem families. Another particularly significant project was related to the utilization of welfare personnel, its beginning phase focused on the development of yardsticks to measure the relative need for graduate social workers and other welfare personnel in direct service positions.

Under the program, grants for general welfare services, training and staff development grants and bursaries are on a matching basis, whereas grants for teaching and field instruction, scholarships and fellowships are non-matching.

TABLE 36  
NATIONAL WELFARE GRANTS PAYMENTS

Province	Research (1)	Bursaries	Fellowships and Scholarships (2)	Training Grants	Teaching and Field Instruction (3)	Staff Development	Welfare Services	Total
	\$	\$	\$	\$	\$	\$	\$	\$
Newfoundland.....		600		1,348		8,838		10,786
Nova Scotia.....				4,267	2,017	1,994		8,278
New Brunswick.....	2,686	1,976		4,984		2,265		11,911
Ontario.....	26,278	2,684	5,207	970	12,621	9,241	484	57,485
Manitoba.....		1,525		13,877	7,069	346		22,817
Saskatchewan.....		6,335		10,977		1,036		18,348
Alberta.....				2,826		2,135	3,876	8,837
British Columbia.....	849			1,050	674	11,721	4,418	18,712
Total.....	29,813	13,120	5,207	40,299	22,381	37,576	8,778	157,174

Note: (1) Includes payments made to local and national voluntary agencies.  
(2) Awards are made direct to successful candidates by Minister of National Health and Welfare.  
(3) Payments are made to schools of social work.



## FAMILY ALLOWANCES

### Summary of Legislation

Family Allowances are payable in respect of every child under the age of sixteen years who has been registered for the allowances, who is resident in Canada, is maintained by a parent or other person and who, if of school age, is in regular attendance at school. Payment is made by cheque each month, normally to the mother, although any person or recognized child-placing agency (not including an institution) by whom the child is maintained may be paid the allowances on his behalf. Allowances are paid at the monthly rate of \$6 for each child under ten years of age and \$8 for each child aged ten or over but under sixteen years of age.

The program is administered by the Family Allowances and Old Age Security Division through regional offices situated in the capital city of each province.

Effective July 1, 1962, the Family Allowances and Old Age Security Division assumed responsibility for the administration of the Family Assistance program as well. The administration of Family Assistance was formerly a function of the Department of Citizenship and Immigration, which still provides the funds for payment of these grants to children ineligible for Family Allowances during their first year in Canada. Assistance is paid at the same rates as Family Allowances. There were 9,494 children from whom Family Assistance was being paid at March 31, 1963. Payments for the month of March totalled \$72,140.

Welfare personnel maintain liaison with public and private agencies and institutions in the child-care field. They also examine reports of misuse of Family Allowances to determine whether an administrator should be appointed. At the end of the year there were 366 cases where allowances were being administered by someone other than the person who would ordinarily be the recipient.

### Program Statistics

At the end of March 1963, there were 2,680,745 families receiving allowances for 6,659,880 children, i.e., for over one-third of the total population of Canada. Net payments for the year were \$531,566,349. Over-payments outstanding at the end of the year totalled \$254,986.

Data on the numbers of families according to the number of children in each being paid Family Allowances in March 1963 are shown below. Other detailed statistics, by province, are contained in the accompanying tables.

<i>Families</i>	<i>Children</i>
858,813	1
777,971	2
495,254	3
270,625	4
134,972	5
69,231	6
35,948	7
19,536	8
10,114	9
4,933	10
2,225	11
850	12
204	13
53	14
9	15
4	16

There were 9,494 children for whom Family Assistance was being paid at March 31, 1963. Payments for the month of March totalled \$72,140.

## OLD AGE SECURITY

### Summary of Legislation

Old Age Security pensions of \$65 monthly are payable to all persons age seventy and over who can meet certain residence requirements. To qualify for pension a person must have resided in Canada for ten years immediately preceding approval of his application or, if he has not so resided, must have been actually present in Canada prior to that ten-year period for twice as long as he was absent during it and must have resided in Canada at least one year immediately preceding approval of his application.

The program is administered by the Family Allowances and Old Age Security Division through regional offices situated in the capital city of each province.

Pensions under the act are paid out of the consolidated Revenue Fund and are charged to the Old Age Security fund. The fund is financed on a pay-as-you-go method through a three per cent sales tax, a three per cent tax on corporation income and, subject to a \$90 limit, a three per cent tax on taxable personal income.

Payment of the pension may be continued for any period of absence from Canada if the pensioner has resided in Canada for at least twenty-five years after attaining the age of twenty-one; if he has not, it may be continued for six months, exclusive of the month of departure from Canada. In March, 1963, payment



was being made under these provisions, enacted in 1960, to 9,037 persons outside Canada. Amongst this number, there were 8,856 entitled to indefinite payment outside the country. There is no definite indication as to the number of those persons being paid outside of Canada who have left permanently. Of the 9,037 pensioners out of Canada, just over 5,900 were in the United States and over 1,500 in Great Britain.

### **Program Statistics**

Old Age Security pensions were paid to 950,766 persons in March, 1963. In 17,460 cases, payment was made to a trustee appointed to administer the pension for a pensioner who was incapable of looking after his own affairs.

### **Old Age Security Planning and Research**

Continuing studies were made of problems connected with the introduction of contributory old age insurance. A member of the department's research staff, with a member of the Department of Finance, carried out a study in the United Kingdom of the British program and a number of consultations were held with the American Department of Health, Education and Welfare on different aspects of old age, survivors and disability insurance.

TABLE 37  
FAMILY ALLOWANCE PAYMENTS, MARCH, 1962 and MARCH, 1963

Province	March 1962			March 1963		
	Families Receiving Allowances		Amount paid	Families Receiving Allowances		Children Receiving Allowances
	Number	Average Allow. per Family		Number	Average Allow. per Family	
Newfoundland.....	65,705	\$ 20.87	\$ 1,371,594	66,657	\$ 20.80	207,120
Prince Edward Island.....	14,190	18.98	269,273	14,344	18.99	40,423
Nova Scotia.....	105,868	17.14	1,814,891	106,018	17.14	271,476
New Brunswick.....	83,014	19.41	1,611,760	83,272	19.33	239,507
Quebec.....	739,126	17.96	13,274,116	752,413	17.87	1,999,894
Ontario.....	929,461	15.32	14,243,323	939,314	15.44	2,172,643
Manitoba.....	132,338	15.94	2,109,858	132,937	16.07	319,564
Saskatchewan.....	131,975	16.70	2,204,326	131,066	16.89	331,394
Alberta.....	204,698	16.13	3,302,917	208,646	16.29	509,805
British Columbia.....	236,646	15.24	3,606,190	239,496	15.40	550,380
Yukon and N.W.T.....	6,296	17.04	107,318	6,582	17.03	17,674
NATIONAL.....	2,649,317	16.58	43,915,566	2,680,745	16.63	6,659,880
						44,586,385



TABLE 38  
NET FAMILY ALLOWANCE PAYMENTS — COMPARISON BY FISCAL YEARS

Province	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57
Newfoundland.....	\$ 10,613,908	\$ 11,038,875	\$ 11,497,719	\$ 11,967,775	\$ 12,414,789	\$ 12,881,415
Prince Edward Island.....	2,495,987	2,522,830	2,558,097	2,590,704	2,621,722	2,640,585
Nova Scotia.....	15,949,541	16,297,170	16,716,374	17,147,920	17,596,685	17,973,392
New Brunswick.....	13,892,907	14,287,535	14,700,819	15,073,324	15,451,544	15,779,360
Quebec.....	102,883,612	107,084,124	111,441,302	116,057,182	120,389,838	124,368,344
Ontario.....	93,207,144	98,303,868	104,409,819	110,492,480	116,604,314	122,539,123
Manitoba.....	16,703,467	17,283,660	17,979,854	18,705,349	19,418,713	19,888,717
Saskatchewan.....	19,424,562	19,723,352	20,244,540	20,894,790	21,401,114	21,644,971
Alberta.....	21,573,430	22,575,584	23,958,081	25,390,585	26,752,793	27,953,311
British Columbia.....	23,063,643	24,399,859	25,904,496	27,405,872	29,097,077	31,029,472
Yukon and N.W.T.....	649,273	680,828	702,801	739,983	986,437	819,150
NATIONAL.....	\$320,457,674	\$334,197,685	\$350,113,902	\$356,465,964	\$382,535,026	\$397,517,840
	1957-58	1958-59	1959-60	1960-61	1961-62	1962-63
Newfoundland.....	\$ 14,131,153	\$ 15,162,900	\$ 15,565,372	\$ 15,960,416	\$ 16,336,849	\$ 16,562,083
Prince Edward Island.....	2,824,311	2,994,334	3,062,692	3,124,017	3,204,881	3,259,952
Nova Scotia.....	19,400,494	20,560,462	20,932,794	21,241,829	21,623,655	21,838,772
New Brunswick.....	17,074,970	18,201,518	18,588,795	18,877,745	19,222,615	19,340,514
Quebec.....	136,080,634	145,278,435	150,462,531	154,185,288	157,712,911	160,299,079
Ontario.....	136,706,313	150,186,253	156,681,500	162,610,724	168,442,100	172,711,354
Manitoba.....	21,520,779	23,091,594	23,730,765	24,384,595	25,065,334	25,523,719
Saskatchewan.....	23,241,829	24,789,278	25,363,936	25,848,509	26,313,109	26,539,801
Alberta.....	31,029,720	34,122,637	35,765,854	37,365,329	38,928,125	40,315,733
British Columbia.....	34,959,036	38,409,308	39,984,176	41,433,470	42,687,279	43,834,184
Yukon and N.W.T.....	907,321	990,349	1,074,944	1,159,725	1,244,335	1,341,158
NATIONAL.....	\$437,886,560	\$474,787,068	\$491,214,359	\$506,191,647	\$520,781,193	\$531,566,349

TABLE 39  
OLD AGE SECURITY STATISTICS

Province	Number of Pensioners in Pay March, 1962	Net Payments for March, 1962	Number of Pensioners in Pay March, 1963	Net Payments for March, 1963	Total Net Payments for Year 1961-62	Total Net Payments for Year 1962-63
Newfoundland.....	17,801	\$ 1,158,017	18,184	\$ 1,187,670	\$11,947,626	\$ 14,013,632
Prince Edward Island.....	7,603	494,958	7,635	497,563	5,151,999	5,962,922
Nova Scotia.....	42,572	2,780,964	43,583	2,850,007	28,395,584	33,817,492
New Brunswick.....	31,316	2,049,217	31,935	2,091,826	21,291,111	24,858,331
Quebec.....	196,827	12,800,988	202,405	13,153,715	131,711,372	155,359,915
Ontario.....	335,339	21,797,084	344,002	22,353,866	226,065,413	265,742,344
Manitoba.....	56,567	3,679,852	57,692	3,764,685	38,085,351	44,617,405
Saskatchewan.....	58,436	3,818,154	58,690	3,903,322	39,621,029	46,334,846
Alberta.....	62,658	4,104,079	64,286	4,219,283	42,276,129	49,787,140
British Columbia.....	117,815	7,691,051	120,678	7,863,991	79,622,315	93,362,860
Yukon and N.W.T.....	656	43,081	676	43,655	439,865	524,445
NATIONAL.....	927,590	\$60,417,445	950,766	\$61,929,783	\$625,107,804	\$734,381,632



## OLD AGE ASSISTANCE

The Old Age Assistance Act provides for federal sharing, under agreements, of 50 per cent of the amounts paid to persons age 65 to 69 by the provinces for assistance under the authority of provincial legislation and the conditions specified in the federal act and regulations. The program is administered federally by the Old Age Assistance, Blind Persons and Disabled Persons Allowances Division.

At March 31, 1963, the number of recipients under the act was 103,159, about 21 per cent of the population 65 to 69 years of age.

The act specifies \$65 a month as the maximum amount in which the Government of Canada may share. The maximum amounts of income, including assistance, allowed by the act are \$1,140 a year in the case of an unmarried person, \$1,980 a year in the case of a married person and \$2,340 a year in the case of a married person with a blind spouse.

All agreements between the Government of Canada and provincial and territorial governments stipulate the amounts specified in the federal act.

The arrangements under which the division audits provincial expenditures for old age assistance continued without change throughout 1962-63.

## ALLOWANCE FOR BLIND PERSONS

The Blind Persons Act provides for federal sharing, under agreements, of 75 per cent of the amounts paid to blind persons 18 years of age and over by the provinces under the authority of provincial legislation and the conditions specified in the federal act and regulations. The program is administered federally by the Old Age Assistance, Blind Persons and Disabled Persons Allowances Division with responsibility for medical decisions being centered in the Medical Rehabilitation Division.

At March 31, 1963, there were 8,634 persons receiving allowances under the Blind Persons Act, an increase of 61 as compared with the number at March 31, 1962.

The act specifies \$65 a month as the maximum amount in which the Government of Canada may share. The maximum amounts of income allowed by the act, including any allowance payable, are \$1,380 a year in the case of an unmarried person without a dependent child or children and \$1,860 where there are dependent children, \$2,340 a year in the case of a married person and \$2,460 in the case of a married person with a blind spouse.

All agreements between the Government of Canada and provincial and territorial governments stipulate the amounts specified in the federal act.

The arrangements under which the division audits provincial expenditures for blind persons allowances continued without change throughout 1962-63.

## ALLOWANCE FOR DISABLED PERSONS

The Disabled Persons Act provides for federal sharing, under agreements, of 50 per cent of the amounts paid to disabled persons age 18 and over by the provinces under the authority of provincial legislation and the conditions specified in the federal act and regulations. The program is administered federally by the Old Age Assistance, Blind Persons and Disabled Persons Allowances Division with responsibility for medical decisions centered in the Medical Rehabilitation Division.

At March 31, 1963, there were 50,621 recipients under the act, an increase of 592 as compared with the number at March 31, 1962.

The act specifies \$65 a month as the maximum amount in which the Government of Canada may share. The maximum amounts of income allowed by the act, including any allowance payable, are \$1,140 a year in the case of an unmarried person, \$1,980 a year in the case of a married person and \$2,340 a year in the case of a married person with a blind spouse.

All agreements between the Government of Canada and provincial and territorial governments stipulate the amounts specified in the federal act.

The arrangements under which the division audits provincial expenditures for disabled persons allowances continued without change throughout 1962-63.



TABLE 40  
FEDERAL PAYMENTS TOWARDS ASSISTANCE TO THE AGED, BLIND AND DISABLED

Province	Old Age Assistance		Blind Persons Allowances		Disabled Persons Allowances	
	Number of recipients March, 1963	Payments	Number of recipients March, 1963	Payments	Number of recipients March, 1963	Payments
Alberta.....	6,479	\$ 2,523,720	463	\$ 271,515	1,780	\$ 697,293
British Columbia.....	7,039	2,675,207	547	319,456	2,248	853,601
Manitoba.....	5,448	2,001,605	379	214,162	1,520	577,684
New Brunswick.....	5,491	2,065,949	701	410,316	2,050	791,069
Newfoundland.....	5,187	1,987,213	429	247,377	1,436	532,852
Nova Scotia.....	5,421	2,007,866	792	450,274	2,919	1,113,882
Ontario.....	23,925	8,458,292	1,877	992,299	14,886	5,537,214
Prince Edward Island.....	1,039	375,349	83	47,103	795	311,830
Quebec.....	37,086	13,793,725	2,891	1,662,936	21,347	8,577,890
Saskatchewan.....	5,866	2,220,539	422	240,693	1,602	630,837
Yukon and N.W.T.....	178	69,561	50	25,690	28	10,154
NATIONAL.....	103,159	*38,179,026	8,634	\$4,881,821	50,621	\$19,634,306

## UNEMPLOYMENT ASSISTANCE

Unemployment assistance is a grant-in-aid program under which the federal government shares on a matching basis in general assistance payments made by provinces and municipalities to persons who are unemployed and in need and their dependents. The general assistance programs providing aid to those covered by the Unemployment Assistance Act are known in the provinces under varying names, including social assistance, social allowances, and general welfare assistance. The federal act, and the agreements with the provinces authorized by it, are administered by the Unemployment Assistance Division, with audit functions performed by field staff of the Comptroller of the Treasury in the Department of Finance.

The agreements permit the provinces and municipalities to set the assistance rates and conditions of eligibility on which federal reimbursement is based, except that the provinces have agreed not to make length of provincial residence a condition of aid. Payments to both employable and unemployable persons are shared; the latter group, which constitutes the majority of the caseload, includes persons with varying degrees of disability and their dependents, and those in homes for special care, such as homes for the aged and nursing homes. Additional assistance payments to recipients of old age security pensions, old age assistance, blind and disabled persons allowances and unemployment insurance are also shared if they are based on a test of need which takes into account the recipient's basic living requirements, as well as his financial resources.

Sharing does not extend to costs of administration, funeral expenses, and expenditures for medical, hospital, nursing, dental and optical care, and for drugs and dressings. Mothers' allowance payments are also excluded, and in those provinces where needy mothers are now aided through general assistance, a deduction is made from claims based on a formula in the agreements designed to exclude from sharing the larger portion of the costs of assisting this group.

Total expenditures under the program for the fiscal year were \$96,476,627, representing an increase of \$4,432,383 or 4.8 per cent over those for the previous year.

Significant changes in assistance programs and their administration have been made in most areas since agreements were first signed with six provinces in late 1955 and early 1956. The coverage of social assistance has become broader through new policies and programs for meeting need, accompanied by increased provincial sharing in the costs of municipally administered assistance. Several provinces have developed provincially administered programs to cover situations in which need is of longer duration; in some cases, these programs are based on the categorical approach, while in others they are of a more general nature designed to meet need, whatever its cause, within a single framework. Increasing emphasis has also been placed on setting assistance rates which are specifically designed to cover the basic requirements for a minimum family budget.



Table 41

## FEDERAL UNEMPLOYMENT ASSISTANCE PAYMENTS TO PROVINCES

<i>Province</i>	<i>Payment</i>
Newfoundland .....	\$ 4,303,261
Prince Edward Island .....	194,140
Nova Scotia .....	1,585,043
New Brunswick .....	1,607,089
Quebec .....	33,579,397
Ontario .....	23,794,175
Manitoba .....	4,624,409
Saskatchewan .....	4,557,846
Alberta .....	6,202,193
British Columbia .....	15,940,386
Yukon Territory .....	45,229
Northwest Territories .....	43,459
	<hr/>
Canada .....	\$96,476,627

TABLE 42  
FEDERAL SHARE OF UNEMPLOYMENT ASSISTANCE\* AND NUMBER OF PERSONS\*\* ASSISTED

Province	April 1962		July 1962		October 1962		January 1963	
	Federal Share Of Assistance	Number Of Persons Assisted	Federal Share Of Assistance	Number Of Persons Assisted	Federal Share Of Assistance	Number Of Persons Assisted	Federal Share Of Assistance	Number Of Persons Assisted
Newfoundland.....	\$ 366,477	62,948	\$ 292,689	52,688	\$ 376,247	61,052	\$ 369,659	61,706
Prince Edward Island.....	15,928	2,494	17,744	1,942	17,796	1,994	19,021	2,865
Nova Scotia.....	133,548	26,072	123,651	24,067	130,679	24,737	148,988	27,594
New Brunswick.....	135,755	34,769	119,499	31,212	134,701	34,383	164,710	41,937
Quebec.....	3,050,566	237,891	2,763,078	190,530	2,836,980	196,571	3,285,180	245,698
Ontario.....	1,698,949	120,793	1,463,425	98,212	1,554,672	99,231	1,940,835	138,639
Manitoba.....	388,367	30,790	332,366	26,287	355,092	26,750	419,889	31,547
Saskatchewan.....	513,048	44,291	327,383	36,584	327,488	34,910	412,229	42,241
Alberta.....	521,587	35,220	454,104	31,633	511,235	33,053	622,530	42,043
British Columbia.....	1,294,997	88,499	1,256,394	84,848	1,247,388	85,515	1,396,453	94,799
Yukon Territory.....	3,757	250	3,105	193	4,258	221	5,742	296
Northwest Territories.....	2,633	331	4,482	561	1,526	260	10,272	1,404
CANADA.....	\$ 8,125,613	684,348	\$ 7,157,920	578,757	\$ 7,508,061	598,677	\$ 8,795,510	730,769

\*The amounts shown are for the months in which assistance was granted to recipients rather than the months in which the federal share was paid to the provinces.

\*\*Includes dependents.



## EMERGENCY WELFARE SERVICES

Efforts were concentrated on assisting the provinces in development of services and on plans for the continuity of emerging welfare services at all levels.

Appointment of regional representatives for Alberta, British Columbia, Nova Scotia and Quebec was the most significant organizational development and has resulted in accelerated provincial planning. Two bilingual headquarters staff positions were approved to be filled early in 1963-64, along with that of the regional representative for Ontario. The continuity of government officer was appointed early in the year.

Progress was made in developing departmental planning for emergency conditions; a readiness plan to preserve the essential services of the department was prepared and a departmental warning system to alert key personnel was established.

Joint planning with other departments of government, in particular National Defence was continued to co-ordinate survival operations. Close liaison was maintained with Emergency Welfare Services in the United States.

### Aid to the Provinces

Progress was made in assisting provincial departments of welfare to organize emergency welfare services. In eight provinces, the program was well established, with a full-time director and many chiefs of services. In Ontario there were full-time emergency welfare planning officers in the Emergency Measures Organization and, in Quebec in La Protection Civile.

Progress has been made to assist preparation of provincial plans, and organization has progressed rapidly at both provincial and zone levels. This development was especially encouraging in that persons appointed to key positions at all levels are largely government and voluntary welfare personnel who have received some training at the Canadian Civil Defence College or in the provinces.

Several provinces have produced mobile feeding units patterned on the federal unit. British Columbia has designed and produced four mobile welfare centre units. Many provinces have conducted exercises to test their preparedness.

Assistance has been given to the provinces in developing provincial emergency legislation, readiness plans, and operational instructions. An extensive survey and tabulation of welfare resources throughout Canada (personnel, equipment, supplies and institutions) required for operations, was commenced.

In addition to the development of basic plans and policies the provinces were assisted in implementation of programs through the annual conference with provincial directors. Also, a further reception community lodging survey, designed to assist provinces in the assessment of their lodging facilities, was carried out in 1962 in Kamloops, B.C.

Courses continued to be provided at the Canadian Civil Defence College for key personnel responsible for directing services in the provinces. The provinces



were also assisted through the provision of technical manuals, precis, filmstrips and other training aids. A new manual "EWS Manual for Civil Defence Workers" and the film "Help for the Homeless" were produced in both English and French and were made available to all provinces.

### **Operational Supplies and Equipment**

The three-year program of stockpiling operational forms and equipment, begun in 1961-62, has continued. Of the 87 mobile feeding units produced to date, 32 have been strategically positioned in eight of the provinces with the remainder being held in reserve.

### **Public Education**

To meet the continued demand for self-help measures, further reprints were made of "Your Emergency Pack" and "Welfare Tips for Survival". Emergency Welfare Services displays continued to be used at professional conferences and public exhibitions across Canada. Two new pamphlets "Its Your Life" and "Personal Services" were prepared to increase understanding of the purpose of Emergency Welfare Services.

## **FITNESS AND AMATEUR SPORT SERVICES**

The Fitness and Amateur Sport Act of 1961 provides for an annual allocation of \$5 million to encourage, promote and develop fitness and amateur sport among the people of Canada.

For purposes of the act "amateur sport" is defined as "any athletic activity when engaged in solely for recreation, fitness or pleasure and not as a means of livelihood", "fitness" as "the state in which a person is able to function at his physical and mental optimum".

Federal aid under the act is channelled through three main streams. The first is through grants to the provinces for development at the community level. The second is through direct assistance for nationally organized agencies, either to assist national or international competition and for development purposes, and for fellowships and scholarships, research, information services and the like. A third channel is direct services provided through the department, the costs of which are a charge against departmental appropriations and not those provided for under the act.

The Minister is advised on the administration of the act by a 30-person National Advisory Council on Fitness and Amateur Sport to which members with special interest in fitness and amateur sport matters are appointed from all provinces of Canada, with due regard both to area representation and the different fields covered by the act.

The council met three times, April 16-17, 1962; November 15-16, 1962; and March 8, 1963. Several subcommittees of the council met both during and between the three full meetings.

Technical committees of experts were convened to evaluate applications for post-graduate scholarships and fellowships, and research projects.



## Grants to Provinces

Federal-provincial conferences of deputy ministers responsible for the administration of fitness and amateur sport programs met twice during 1962 to discuss ways and means of co-operation. In addition three meetings of provincial program directors were held.

In September, 1962 an agreement was signed by nine provinces, the Yukon, and the Northwest Territories for the 1962-63 fiscal year. In this first year of the joint program grants were made available to the provinces on a non-matching basis.

In May a planning and organization grant totalling \$250,000 was made available on the basis of \$15,000 to each province and territory, and the balance on a per capita basis. An additional sum of \$250,000 was made available in September to provinces which signed an agreement as provided in Section 5 of the act, for projects designed to strengthen and extend the 1962 provincial programs. Under the grants \$15,000 was allocated to each province, with the balance on a per capita basis. All provinces but Quebec participated in the program, with the amounts allocated and spent being as follows :

TABLE 43  
FITNESS GRANTS

### SUMMARY OF EXPENDITURES ACCORDING TO PROVINCES 1962-1963

Province	Allocation		Amount Spent	
	Planning Grant	Projects Grant	Planning Grant	Projects Grant
Newfoundland.....	\$16,779	\$16,779	\$16,779	\$13,893
Prince Edward Island.....	15,400	15,400	15,400	15,181
Nova Scotia.....	17,810	17,810	17,810	13,717
New Brunswick.....	17,289	17,289	17,289	10,039
Quebec.....	35,215	.....	.....	.....
Ontario.....	38,898	38,898	38,898	12,510
Manitoba.....	18,531	18,531	18,531	18,416
Saskatchewan.....	18,509	18,509	18,509	16,172
Alberta.....	20,174	20,174	20,174	14,438
British Columbia.....	21,247	21,247	21,247	13,439
Northwest Territories.....	15,091	15,091	15,091	7,291
Yukon.....	15,057	15,057	15,057	5,900
Total.....	\$250,000	\$214,785	\$214,785	\$140,995

TABLE 44  
FITNESS GRANTS TO  
NATIONAL ORGANIZATIONS AND ASSOCIATIONS 1961-1962, 1962-1963

Organization	Amounts Received		Total
	1961-1962	1962-1963	
Sports Governing Bodies—Co-ordinating Multiple Sports	\$	\$	\$
Amateur Athletic Union of Canada			
Boxing Committee.....	1,000	3,377	4,377
Fencing Committee.....	500		500
Gymnastics Committee.....	15,000	5,000	22,762
		2,762	
Weightlifting Committee.....	2,250	1,067	3,317
Wrestling Committee.....	1,500	2,088	3,588
Track and Field Committee.....		2,000	2,000
Handball Committee.....			
National Championships.....		16,677	16,677
British Empire and Commonwealth Games Association.....	30,000		30,000
Canadian Olympic Association.....		30,000	80,000
		50,000	
	50,250	112,971	163,221
Sports Governing Bodies—Single Sports			
Canadian Amateur Basketball Association.....		5,000	5,000
Canadian Amateur Bobsleigh and Tobogganing Association.....		4,800	4,800
Canadian Amateur Hockey Association.....		50,000	50,000
Canadian Amateur Ski Association.....	14,785	15,310	31,095
Canadian Amateur Speedskating Association.....	500	8,000	8,500
Canadian Amateur Swimming Association.....		4,000	8,450
		4,450	
Canadian Association of Amateur Oarsmen.....		10,000	10,000
Canadian Badminton Association.....	1,500	1,200	4,700
		2,000	
Canadian Canoe Association.....	3,800	400	4,200
Canadian Civilian Association of Marksmen.....	15,000		15,000
Canadian Cricket Association.....		1,633	1,633
Canadian Field Hockey Association.....		1,000	2,900
		1,900	
Canadian Figure Skating Association.....		10,000	10,000
Canadian Intercollegiate Athletic Union.....		18,000	18,000
Canadian Lacrosse Association.....		3,000	3,000
Canadian Ladies' Golf Union.....	10,000		10,000
Canadian Lawn Tennis Association.....	18,000		18,000
Canadian Roller Skating Association.....		500	500
Canadian Ski Patrol.....		9,000	9,000
Canadian Snowshoe Union.....		2,000	2,000
Canadian Table Tennis Association.....		750	750
Canadian Volleyball Association.....		1,500	1,500
Canadian Wheelmen's Association.....	5,000	350	5,350
Canadian Yachting Association.....		750	750
Royal Canadian Golf Association.....	5,000		5,000
Rugby Tours Committee of Canada.....	10,000		10,000
Sub-Total.....	83,585	157,543	241,128
Non-Competitive Sports			
Canadian Wild Life Federation.....		20,000	20,000
Canadian Youth Hostels Association.....		4,750	14,750
		10,000	
Canadian Association for Health, Physical Education and Recreation.....		6,000	10,000
		4,000	
Sub-Total.....		44,750	44,750
Agencies Operating Programs For Their Own Members			
Boys' Clubs of Canada.....		6,000	6,000
Y.M.C.A.....		6,428	6,428
Y.W.C.A.....		21,810	21,810
Sub-Total.....		34,238	34,238
Special Projects			
Canadian National Exhibition—(Canadian Fitness Festival).....		50,000	50,000
Calgary Olympic Development Association.....	35,000	30,000	95,000
		30,000	
Canadian Amateur Sports Federation.....		10,000	10,000
Royal Canadian Legion.....		50,000	50,000
University of Ottawa.....		5,000	5,000
Sub-Total.....	35,000	175,000	210,000
Grand Total.....	168,835	524,502	693,337



## **Grants to National Associations 1962-63**

To assist in increasing the number of active participants in sports and recreational activities which contribute to fitness, and to raise levels of participation, grants were made to sports governing bodies to assist in meeting the costs of national and international competitions and to provide opportunities for coach training. Other national associations were given assistance in leadership training projects, in the holding of demonstrations, and in provision of supervision of branch activities. Assistance was also provided to encourage the organization of new activity clubs and to enable experts to go on demonstration tours and to hold clinics.

Grants are ordinarily made only for the extension and strengthening of existing services and to organizations which are national in scope and interest. The pre-existing level of financial support must be maintained. The principle of self-help is applied to all applications, grants being restricted to a percentage of the costs which takes into consideration expenditures, revenues, and services pertaining to the new aspects of the program, the present and potential number of participants and the extent of the geographic area served.

The grants listed on page 128 have been made to national organizations since the inception of the program.

## **National Fitness and Amateur Sport Post-graduate Scholarships and Fellowships**

Awards to assist post-graduate and senior training are made on the advice of a committee composed of representatives of the National Advisory Council, the provinces, and of schools of physical education. Undergraduate scholarships and bursaries are awarded on the recommendation of the province.

Post-graduate scholarships are designed to assist persons already holding a bachelor's degree in physical education or recreation to attain higher educational qualifications. Senior research fellowships are designed to assist persons holding a master's degree in physical education, and whose area of specialization is research, to proceed to the doctoral level. Special fellowships are designed to assist senior professional personnel in the study of areas of work in the administrative or research fields which are of special interest to them. Undergraduate scholarships are awarded on recommendations by provinces to persons entering the first year of a course leading to a degree in physical education or recreation; bursaries in any year.

Scholarships and fellowships are granted on a merit basis, bursaries on a combination of merit and need.

Undergraduate scholarships are of a value of \$500 and bursaries of up to \$500. The maximum award for a post-graduate scholarship is \$3,000 for an academic year, for a senior research or special fellowship \$4,000 plus \$500 marriage allowance.

TABLE 45  
SUMMARY OF FITNESS AWARDS

Type of Award	No.	Amount \$
A. Post-Graduate Scholarships		
1. Master's Level		
a) Summer courses 6-14 weeks .....	9	7,150.
b) Full year .....	12	24,000.
2. Doctoral Level		
a) Summer courses 6-14 weeks .....	6	4,700.
b) Full year .....	3	6,000.
B. Senior Research Fellowships.....	4	18,605.
C. Special Fellowships.....	2	9,693.

TABLE 46  
SUMMARY OF POST-GRADUATE SCHOLARSHIPS & FELLOWSHIPS

Type of Award	Province of Residence						Total
	B.C.	Alta.	Ont.	P.Q.	N.S.	Nfld.	
Post-Graduate Scholarships							
Master's Level.....	6	7	5	2		1	21
Doctoral Level.....	2	3	1	2		1	9
Senior Research Fellowships.....	2		1		1		4
Special Fellowships.....				2			2
Total.....	10	10	7	6	1	2	36

National Fitness Research Grants

Grants are designed to encourage important new types of investigation of problems in the fitness field. Applications are assessed by the Fitness Research Review Committee, a representative group of senior research experts.

Three grants were made in 1962-63, amounting to a total of \$34,348.03.



## **Instructional and Reference Materials**

A beginning was made on the production of comprehensive instructional "How To" kits which include an illustrated manual, a film, filmstrips and loop films designed to assist both instructors and participants. Figure skating was selected as the activity for 1962-63 kit production and the kit was made available for distribution during the fall of 1963.

Measures were taken to extend and strengthen the reference resources of the department in respect to visual aids, books, journals, pamphlets and reports.

## **CIVIL DEFENCE TRAINING**

A total of 3,550 persons used the facilities of the Civil Defence College at Arnprior, Ontario, for 60 courses, 7 conferences, 17 group visits and 1 Civil Service Commission course.

Courses included: National Survival Orientation and Operations, Emergency Health, Emergency Welfare, Radiological Defence and Rescue Instructors.

Conferences were conducted for mayors and reeves, War Supplies Agency personnel, provincial Emergency Welfare Services directors, hospital directors and communications personnel.

Group visits included organizations such as university schools of nursing, women's institutes, county and municipal councils, students and teachers, meat inspectors (Kemptonville Agriculture School) Boy Scout troops, militia units.

Copies of training precis were distributed to the provinces in these numbers: Emergency Welfare Services precis 76,794; Civil Defence College precis 43,922.

## ADMINISTRATION BRANCH

### DEPARTMENTAL SECRETARY'S DIVISION

The activities of the Departmental Secretary's Division continued to fall into two broad classes — those which the Departmental Secretary carried out personally and those which were undertaken largely by the staff of the division.

Included among the first group were: (a) assisting the minister and the deputy minister in preparation and approval of the departmental estimates; (b) acting as financial adviser to the department; (c) acting as the deputy ministers' substitute with respect to approval of accounts payable, travel claims, requests for encumbrances, requests for transfer between allotments, submissions to Council and to Treasury Board, and other financial documents; (d) preparing material for tabling in Parliament; (e) acting as departmental security officer; (f) organizing all financial campaigns within the department; (g) carrying out special projects assigned from time to time.

The second group of responsibilities are outlined in the following paragraphs.

The Registry Services continued to be responsible for records management throughout the department in Ottawa and for providing advice and assistance in respect of records in many departmental establishments across Canada. The section was asked to assume responsibility for records of the Civil Service Health Division and initial steps were taken toward establishment of a Civil Service Health sub-registry. The records retirement program was actively pursued, resulting in substantial savings in space, equipment, and staff time. Mail, messenger and truck services at head office continued to be provided by this section.

The Financial Services Section continued to perform a centralized accounting advisory service designed to assist the directorates and divisions (other than those comprising the Indian and Northern Health Services) in the development and budgeting of funds. This section also carried out much of the detail involved in preparation of departmental estimates and continued to act as liaison between the department and the Treasury Office serving it.

Unusual problems arose from the fact that the entire year's financing was by way of interim supply and Governor-General's warrants. This necessitated full examination and review each month of all departmental budgets and forecasts and involved much consultation with directorates and divisions to assess the adequacy of funds to carry out their programs. A constant control of expenditures — in many cases on a day-to-day basis — was essential to ensure the most efficient use of available funds.

The work of the Parliamentary Papers and Correspondence Section consisted largely of preparing replies to letters concerning a wide range of health and welfare subjects. This section was also responsible for processing, distributing, and recording all submissions, Orders-in-Council, Treasury Board Minutes,



supplementary lists, Treasury Board circular letters, and other documents, and for the daily reading of all parliamentary papers and the excerpting, distributing, and indexing of items of interest to this department.

The Addressograph Section, which serves all divisions, addressed nearly two million pieces of material from its extensive lists of addressograph plates. Photocopying service was also provided.

All typing and matrix work required in the preparation of material for reproduction by the Department of Public Printing and Stationery was done by the Secretarial Services Section. A central source of typing assistance was again provided to the entire department in Ottawa by this section.

In addition, the Departmental Secretary's office acted as an information centre for the entire department.

## INFORMATION SERVICES

A continuing flow of informational and educational material is an integral part of a nation's public health and welfare programs. The function of Information Services is to maintain this flow of materials. In the fiscal year 1962-63 items produced in part or entirely by this division included pamphlets, booklets and other printed materials; films and filmstrips and radio playlets. They ranged from projects aimed at the comparatively narrow audience of native Canadians — Indians and Eskimos — to those aimed at the general population and dealt with subjects as diverse as water pollution and mental health grants.

### The Printed Word

A number of new printing projects were completed, including:

A two-piece public information kit, a pamphlet entitled "Family Health Planning for Disaster" and a medical supplies check-off chart for Emergency Health Services. Also produced for this division was a book "Emergency War Surgery", which is a NATO publication revised for distribution to over 20,000 Canadian civilian doctors and a revised booklet "Hospital Disaster Planning" designed for distribution to Canadian hospitals.

Three items for Emergency Welfare Services — "Emergency Welfare Services Manual", "Personal Services", a folder, and "It's Your Life", a leaflet.

For Indian and Northern Health Services, this division assisted in production of leaflets and posters entitled "When Baby Gets Big", sanitation charts and leaflets, two flip charts, "Colds" and "Diarrhoea" in French and a booklet "Good Food — Good Health" in English and Eskimo syllabics.

Two reports on pollution covering the St. John River and the St. Croix River were produced for Public Health Engineering.

A bilingual cover for the monthly "Radioactive Fallout Report" was designed for Radiation Protection Division.



Two folders "Immunization Requirements and Recommendations for International Travellers" and "Nursing Uniform Regulations" were produced for Quarantine, Immigration Medical and Sick Mariners Services.

Cheque inserts were produced for Family Allowances and Old Age Security Division.

Two folders "Nursing Counsellor Service" and "Your Health Services", were printed for Civil Service Health Division.

A comprehensive booklet entitled "Hospital Insurance and Diagnostic Services Act" was completed for Hospital Insurance Section.

A major French revision was completed of the Nutrition Division booklet "Healthful Eating".

A pamphlet "Opportunities for Speech Therapists and Audiologists" was produced for Medical Rehabilitation Division.

A colorful poster entitled "Some Foods Help Keep Teeth Clean" was completed for Dental Health Division.

A large proportion of the division's work in publications consisted, as usual, of reprints of numerous books, booklets, pamphlets and folders, particularly those for Mental Health Division.

Individual requests for material during the fiscal year totalled 20,000. A total of 4,289,460 pieces of literature, including 3,014,830 English and 1,274,630 French were distributed.

The division distributed the following: 10 issues of "Canada's Health and Welfare", with 720,000 copies; 12 issues of "National Health Radio Notes", 3,660 copies; 12 issues of "Press Fillers", 5,100 copies; 12 issues of "Health Column", 5,880 copies; 11 issues of the "Medical Services Journal", 2,530 copies; two issues of the "Dental Health Newsletter", 1,100 copies.

An unusually high degree of co-operation among Information Services, other divisions of the department and the Queen's Printer made it possible to have delivered and billed within the fiscal year almost every printing project launched during that period.

At the request of a number of divisions within the department, the division supplied designs and artwork for many projects.

Displays were completed for the following directorates and divisions: Medical Services, Food and Drug, Mental Health, Emergency Health and Emergency Welfare.

### **Mass Media Projects**

The ten-minute weekly radio show "Here's Health", was, during the past fiscal year, retitled to "Your Health, Your Welfare", in order to indicate the two major areas of interest covered by the program over the past 13 years.

A ten-program series on nutrition was a feature of the department's work in the TV field and served to established the fact that there is a growing awareness



among departmental personnel of the value of this medium in terms of public information and education.

Members of this division served as liaison officers on a number of occasions when senior departmental officials appeared on radio or TV programs.

The division took part in production, for Fitness and Amateur Sport Directorate, of an instructional kit made up of a 14-minute film, filmstrips, film loops and a training manual on the subject of figure skating. Produced with the close co-operation of the Canadian Figure Skating Association, the kit is the first of a series of "how to" packages dealing with various fitness activities.

Work in connection with procuring, screening and evaluation of films continued. The following table gives recent statistics relating to the three film libraries.

NATIONAL FILM LIBRARIES

	Total No. Films as of March 31/62	Total No. Films as of March 31/63	Withdrawals (1962-63)	Additions (1962-63)	Circulation* (1962-63)
Health .....	476	488	11	23	2,605
Medical & Biological .....	321	328	2	9	1,230
Welfare .....	36	37	—	1	97
Totals .....	833	853	13	33	3,932

\*Indicates number of bookings only.

The Camera at Work

A highlight of the work done by the Biological Photographic Laboratory was a photographic coverage of conditions and types of operations carried out in a fluorspar mine at St. Lawrence, Newfoundland.

The amount of work done for the Food and Drug laboratories increased considerably in the 1962-63 fiscal year. Projects for this directorate included: photographs and lantern slides of a large number of starch gels containing enzymes and pesticides; photography in black and white, as well as colour, of filter papers containing impurities from raspberry jam; photography in black and white and colour of small, unusual narcotic samples originating in the Orient.

A large project for Occupational Health was the microphotography of Haematoxylin Eosin stain and fat stain in fasting and non-fasting rats.

Photographic coverage of microcolonies and test tubes was another project carried on through the year for the Biologics Control Laboratory of the Laboratory of Hygiene. Other laboratory projects included photography of lesions developed in the stomachs of rabbits and photomicrographs of cell cultures.

Statistics for the fiscal year are as follows: 3,500 black and white negatives, 12,300 black and white prints, 750 lantern slides and 780 colour transparencies.

Public Relations

Staff of the division represented the department at a number of provincial, national and American conferences. In many cases departmental displays were



manned by staff members of this division. The division was involved in arrangements for several conferences of the National Advisory Council on Fitness and Amateur Sport and of federal and provincial fitness officials.

## LEGAL

The Legal Division provides legal services to the department in matters within departmental responsibility and concern. These services cover the furnishing of legal advice and opinion, including advice respecting prosecutions arising out of the administration of the Food and Drugs Act, the Narcotic Control Act, the Family Allowances Act and the Old Age Security Act. The services of the division include preparation of contracts and other legal documents, interpretation of statutes and regulations and preparation of memoranda and submissions to the Cabinet, the Governor-General-in-Council and the Treasury Board.

The services of the division were required during the year in connection with amendments to legislation administered by the department, including numerous revisions of regulations dealing with Food and Drugs, Narcotic Control and other regulations enacted under the authority of such legislation.

The division provided consultative legal services to a number of voluntary health agencies and organizations, and officers of the division represented the department on various boards concerned with policy and administrative matters in which the department has some interest or responsibility.

The Legal Adviser, at the request of the World Health Organization, provided legal assistance to the Government of Jamaica in revision of certain health laws.

## DEPARTMENTAL LIBRARY

The Departmental Library continued with selection, acquisition and organization of reference and technical books, serials, pamphlets, and government documents on all subjects related to the department's work for collections in Ottawa and in field establishments. The usual services of identification, ordering and cataloguing, answering inquiries and advising about authorities and sources of information were carried on. In Ottawa reference and circulation work was carried on from the libraries in the Jackson Building, the Food and Drug Building, the Laboratory of Hygiene and the Environmental Health Building.

In July 1962 space became available in the Jackson Building for staff concerned with selection, acquisition and organization of material for various library collections. A temporary stock-room in the sub-basement was built and equipped to receive that part of the library collection that has been accommodated by the Dominion Archivist in the Records Centre Building since November 1958. We are greatly indebted to Dr. Lamb and his staff for their kindness and assistance in this respect for nearly four years.

Assistance was given with the formation of a Committee on Medical Science Libraries of the Canadian Library Association. It is hoped that this group will develop into a useful organization for co-operation and assistance to various types of medical libraries in Canada.



## PERSONNEL ADMINISTRATION AND ORGANIZATION

### Organization Studies

Publication of the first three volumes of the Report of the Royal Commission on Government Organization (Glassco Commission) led to a series of studies throughout the department, including a study of the department's organization for financial management. Many departmental officers are participating in inter-departmental committees established to review certain Glassco Commission recommendations.

The Advisory Services Branch of the Civil Service Commission conducted a number of studies in this department including the following:

Functions and organization of the Public Health Engineering Division.

Work performance standards and work measurement.

Techniques in the regional offices of the Family Allowances and Old Age Security Division and organization of the regional offices.

Organization of the Food and Drug Directorate.

Organization of the Medical Services Directorate.

Other organization studies conducted by departmental officers involved the Unemployment Assistance Division, the Welfare Grants Division and the Fitness and Amateur Sport Directorate.

### Establishment Changes

As part of the economy measures program introduced by the government in June 1962, establishment increases were held to a minimum and could only be authorized to implement new policies approved by Cabinet or to meet workload increases which could not be met by any other means. Consequently, apart from the establishment changes which had been authorized to come into effect on April 1, 1962, the only establishment increases approved consisted of 24 positions in the Food and Drug Directorate; 1 position in Information Services Division (to provide an Information Officer for the Fitness and Amateur Sport program); 4 positions in the new Welfare Grants Division; 3 positions for Emergency Welfare Services Division and 1 position for Emergency Health Services Division. Seven positions were deleted from the establishment of the Civil Defence College at Arnprior, Ontario.

As a result of the introduction of improvements in procedures and systems in the Family Allowances and Old Age Security Division staff savings were realized so that although the establishment on March 31, 1963 was 835, only 25 less than the establishment authorized for April 1, 1962, a real reduction of some 120 staff members had been effected and the plans had been laid for an establishment of only 740 for April 1, 1963. It was possible to effect this reduction by normal turnover and transfers without any layoffs.



## **Classification and Salary Studies**

There were twelve classes of staff employed in this department for which either new series were created or old series were amended. Perhaps the most noteworthy was the introduction of a "Welfare Administrator" series designed to provide an appropriate classification for intermediate and senior officials engaged in the administration of social security and welfare programs. Thirty-seven other classes of departmental employees received salary revisions during the year, some retroactive to October 1, 1961, others taking effect from January 1, 1962.

Adjustments were made in the classifications of 351 positions.

## **Recruitment and Staffing**

Recruitment activity was curtailed in most divisions following the imposition of the government's economy measures in the summer of 1962. However the Food and Drug Directorate and the "direct treatment classes" of the Medical Services Directorate were excepted from the restrictions. Although there were 831 appointments during the year there were also 1,031 terminations leaving 200 fewer established positions filled at the end of the year than at the beginning.

There were 450 promotions (including reclassifications) during the year; 106 resulted from a reorganization of the Family Allowances and Old Age Security Regional Offices. In connection with this reorganization, a special staff appraisal program was conducted as a result of which promotions were expedited. A similar appraisal program of stenographic and typing classes employed in Ottawa was conducted. The number of positions involved was 237 of which 226 were occupied at the time the appraisal program commenced. As a result of the program, interchanges were arranged so that the most effective use could be made of available staff resources. There were 32 promotions in these classes.

Serious shortages continue in many of the classes employed in the department including physicians, dentists, nurses, social workers, sanitarians, pharmacologists and public administrators in several areas.

## **Staff Training**

Twenty-seven professional employees were enrolled in university courses of one year's duration; 35 others followed specialized short courses given by universities and other non-governmental institutions; 16 attended administrative courses conducted by the Civil Service Commission.

A staff training section was established within Personnel Services and although most of its time has been taken up in determining staff training needs and planning, it was nevertheless able to conduct courses in report writing and letter writing.

## **Laws and Regulations**

The implementation of the new Civil Service Regulations which became effective April 1, 1962, necessitated the rewriting of many departmental procedures. Consultations were also held during the year with Treasury Board staff in connection with the revision of the Public Service Regulations and the Prevailing Rate Regulations.



TABLE 47  
STAFF SITUATION WITH SPECIAL REFERENCES TO PROFESSIONAL CLASSES

Classifications	Authorized Positions March 31, 1963	Vacant Positions March 31, 1963	Appointments During the Fiscal Year	Terminations During the Fiscal Year	Approximate Terminations per 100 Positions	Promotions Including Reclassifications
Physicians.....	298	38	23	33	11	32
Dentists.....	32	8	4	4	12.5	1
Registered Nurses.....	792	48	247	275	34.5	39
Chemists.....	119	16	9	12	10	15
Bacteriologists.....	39	3	4	2	5	3
Biologists.....	4	3		3		3
Librarians.....	6	1				1
Pharmacists.....	9	1	1	1		
Laboratory Technicians.....	27	8	5	3	11	1
Nutritionists.....	8	1	1	1		1
Dietitians.....	12	2				
X-Ray Operators.....	39	5	1	3	8	
Food and Drug and Narcotic Inspectors.....	110	6	21	2	1.8	13
Public Health Engineers.....	30	4	3	3	10	1
Social Workers.....	31	3	2	1		2
Architects.....	3	1				
Economists.....	22	3		1		1
Information Officers.....	7			1		5
Statisticians.....	10	1		1		2
All Other Classes.....	3,844	440	510	685	18	330
Total.....	5,442	592	831	1,031	18.9	450*

\*These figures do not include — ward aides, housemaids, hospital attendants.

TABLE 48  
GEOGRAPHICAL DISTRIBUTION OF ESTABLISHED FULL-TIME POSITIONS — MARCH 31, 1963

Location	Welfare Branch		Health Branch			Administration Branch	Total
	F.A. and O.A.S.	Other	Medical Services	Health Services	Food and Drug		
Ottawa.....	13	48	208	470	239	369	1,347
Yukon and N.W.T.....			312				312
British Columbia.....	70	2	583	6	28		689
Alberta.....	58	2	659	5	5		729
Saskatchewan.....	52		257	3	2		314
Manitoba.....	47	1	248	7	25		328
Ontario (Excluding Ottawa).....	277	108	478	4	57		924
Quebec.....	197	3	101	7	47		355
New Brunswick.....	38	1	10	3	4		56
Nova Scotia.....	45	2	41	5	23		116
Prince Edward Island.....	10				1		11
Newfoundland.....	28		7		3		38
Overseas.....			137				137
Total.....	835	167	3,041	510	434	369	5,356



TABLE 49  
ESTABLISHMENT BY DIVISION MARCH 31, 1963

Division	Established Full-Time Positions	Established Part-Time and Seasonal Positions	Division	Established Full-Time Positions	Established Part-Time and Seasonal Positions
Minister's Office.....	17		Hospital Design.....	7	
Deputy Minister—Health.....	3		Mental Health.....	10	
Deputy Minister—Welfare (and International Welfare).....	7		Nutrition.....	20	
Departmental Secretary's.....	137		Nursing Consultant.....	3	
Information Services.....	35		Laboratory of Hygiene.....	154	5
Legal Services.....	7		Occupational Health.....	54	1
Library Services.....	17		Public Health Engineering.....	49	
Personnel Services.....	51		Radiation Protection.....	65	
Purchasing and Supply Services.....	34		Food and Drug.....	434	10
Research and Statistics Services.....	61		Medical Services.....	3,041	68
Director, Health Services.....	17		Family Allowances and Old Age Security.....	835	
International Health.....	4		Old Age Assistance.....	18	
Research Development.....	4		Unemployment Assistance.....	7	
Special Projects.....	3		Civil Defence College.....	105	
Health Insurance.....	15		Emergency Health Services.....	56	
Health Grants.....	13		Emergency Welfare Services.....	22	
Medical Rehabilitation.....	9		Fitness and Amateur Sport.....	11	
Child and Maternal Health.....	7		Welfare Grants.....	4	
Dental Health.....	7				
Epidemiology.....	13	2	Totals.....	5,356	86

## PURCHASING AND SUPPLY

The division continued to carry out its responsibility for procuring materials and equipment, entering into contracts, and arranging services of all types for the various directorates, divisions, laboratories, hospitals, far-flung Arctic posts of Indian and Northern Health Services and the overseas offices of the Immigration Medical Services.

Laboratories and hospitals continued to require special electrical, electronic, and nuclear radiation instrumentation.

The increasing cost of food and food products and some types of materials and supplies together with higher transportation costs resulted in a further delegation of local purchasing authority. During the year field hospitals, health units, etc., processed orders valued at more than \$1,300,000.

Approximately 14,300 requisitions were received and processed by the division comprising almost all known commodities and involving orders placed in Canada, United States, United Kingdom and Continental Europe. This required issuance of nearly 13,000 tenders and inquiries to the trade concerning prices, delivery, etc., and the processing of more than 27,000 invoices. Included in this work and in the expediting of deliveries was the processing of approximately 8,000 pieces of correspondence. There were nearly 1,400 entries cleared through Customs.

The Departmental Stores handled 2,238 incoming shipments comprising more than 32,000 pieces of incoming freight. Approximately 11,000 pieces were shipped out involving the preparation of more than 5,500 issue vouchers. At year's end the total inventory value of stock in stores was \$135,708.

Forty-five replacement vehicles were purchased and 19 new vehicles were added to the motor vehicle fleet. At the end of the fiscal year the department had 299 motor vehicles in operation.

The division processed 562 requisitions to the Department of Public Works for alterations, repairs and painting for offices and laboratories in Ottawa and 354 requisitions for the supply of office furniture and furnishings. Due to the cutback in funds available for furniture and furnishings there was a slowdown in the processing of these requisitions by the Department of Public Works which increased the follow-up work by the division.

The Inventory Section continued to receive inventory cards from field locations. There were 173 disposals reported to Crown Assets Disposal Corporation and 31 to the Department of Public Works. A new procedure was introduced designed to secure accurate records of office machines and equipment on charge in the department.

The Forms Control Programme instituted several years ago continued to show beneficial results and it was possible to discontinue the use of nine Indian and Northern Health Services forms with a saving in annual paper consumption of some 355,000 sheets.



## RESEARCH AND STATISTICS DIVISION

At the beginning of May 1962 the principal research officer, Biostatistics, left the division to become consultant in planning and evaluation in the Health Services Directorate. In the following month word was received that the division's data-processing equipment would have to be replaced as the supplier was withdrawing from Canada. As well as planning for our own needs, detailed study was also required to plan adequate statistical services for the department and the application of data-processing techniques to departmental projects in the light of the Glassco Commission recommendations.

A number of bulletins were published during the year, including the English and French editions of "Legislative Changes in General Assistance, Mothers' Allowances", and "Living Accommodation for the Aged in Canada, 1958 to 1961", the French edition of "Government Expenditures on Health and Social Welfare, Canada, 1927 to 1959", and "Changes in Child Welfare 1958 to 1961", and the English edition of "Expenditures on Personal Health Care in Canada, 1953 to 1961". In addition, the report "The Genetically Significant Radiation Dose Due to the Use of Diagnostic X-Rays in Canadian Public Hospitals" was published as a Radiation Protection Division bulletin, and "Report of a Study of Chronic Disease as a Problem in Canada" was completed for departmental use. Material was prepared within the division for inclusion in the "Canada Year Book 1963", the "Canada 1963 handbook", the "Encyclopaedia of Social Work", the "Canadian Annual Review", "Working and Living Conditions in Canada", the I.L.O. "Yearbook of Labour Statistics", and the "Annual Report of the Minister under the Hospital Insurance Act".

Division staff continued to render services to the Director of International Welfare Services in arranging training and observation programs related to welfare and rehabilitation services for foreign students brought to Canada under technical assistance training schemes administered by the External Aid Office. A report on a work sampling study of the Jamaican Public Health Service was completed for the World Health Organization. The division served to co-ordinate the various interests of the department in the proposed 1965 revision of the International Statistical Classification of Diseases.

### Royal Commission on Health Services

Work progressed on a number of projects undertaken for the Royal Commission on Health Services. A report was submitted to the Commission on "The Provision, Distribution and Cost of Drugs in Canada". Pre-publication data from studies on physicians' incomes, personal health care expenditures, the utilization of hospital facilities and personnel, and provincial hospital morbidity statistics were provided to the Commission, and the survey of physicians' questionnaires was edited, coded and prepared for tabulation. Tabulations were provided from division records regarding non-responding physicians. Assistance was given to investigators in the fields of nursing service and nursing education, medical and paramedical manpower, health economics, prepaid insurance, and morbidity statistics.



## **Hospital and Medical Care Insurance**

The division continued to provide research services to the Health Services Directorate on the hospital insurance program in Canada, and medical care programs in Canada and other countries. Estimated per capita costs of in-patient services in Canada were prepared as the basis for determining federal advances to the provinces under the hospital insurance program during 1963. Several research memoranda were prepared for the departmental committee on health insurance, and senior divisional personnel served on this committee.

Members of the division's staff provided consultant services to provincial hospital authorities, participated in provincial hospital institutes, and served on the federal-provincial subcommittees on quality of care, research and statistics, and finance and accounting. The director chaired working parties on hospital standards and on the use of admission-separation forms. Data on hospital utilization, beds, and costs were prepared for the use of Louis Reed of the United States Public Health Service in his forthcoming book on the Canadian Hospital Insurance Program.

Studies continued on public and voluntary medical care in Canada. Projects under way include analyses of the experience of medical care insurance programs and health care programs for public assistance recipients. Developments in foreign medical care programs were kept under review. Staff members served on the interdepartmental committee dealing with the group surgical-medical insurance plan for federal civil servants and with pension plans for hospital employees.

## **Hospital Services**

Three staff members concluded their work for the Deputy Minister of Welfare who served as Chairman of the Manitoba Hospital Survey Board. The Board's "Report on the Survey of Hospital Personnel in Manitoba", analyzing training facilities and personnel requirements for nurses, technicians, therapists, and other hospital personnel, was submitted to Manitoba. Work continued on the study of hospital utilization, facilities and personnel in Canada from 1948 to 1960. Consultant services were provided to other provinces regarding surveys of their hospital requirements.

## **Hospital Statistics**

From the "Annual Returns of Hospitals for 1960" which were edited, coded and tabulated by division staff, summary tables and analyses were prepared for inclusion in the "Annual Report of the Minister under the Hospital Insurance Act". Intensive study of this project during the year will result in major changes in the editing process and in the format and text of subsequent reports. Arrangements were made with the provinces to collect preliminary data from the unedited returns to compile up-to-date information for the use of departmental consultants. For the Advisory Committee on Hospital Insurance, special analytical hospital indices for 1959 and 1960 were prepared. The annual statistical report on hospital morbidity in 1961 was completed for the Territorial Hospital Insurance Service, and the national compilation of the same data for all provinces was initiated. A sta-



tistical report and supporting commentary on the work sampling study in Prince County Hospital was prepared for the department consultant in hospital nursing on behalf of the Prince Edward Island government, and a similar study was initiated for the other Prince Edward Island hospitals.

### **Health Economics**

The analysis of expenditures on hospital, medical, dental, drug, and related personal health care services from 1953 to 1961 was published in March, 1963. The study of the average earnings and expenses of practice of physicians during the 1957-1960 period was scheduled for publication in the summer of 1963.

### **Mental Health**

For the Mental Health Division a final draft of a bulletin on mental health statistics 1955 to 1960 was prepared, and a survey of psychiatric opinions about the psychopathic personality was conducted and preparation of a report analyzing the survey's findings was undertaken. A statistical report on psychiatric units in general hospitals for the Advisory Committee on Mental Health was undertaken.

### **Rehabilitation and Chronic Diseases**

A report of chronic disease incidence in Canada was prepared as a departmental reference. A bibliography on research projects on long-term care was prepared, and data were compiled on beds in Canadian nursing homes and hostels for the aged and infirm. A study of helplessness allowances in disability benefit programs of several foreign countries was initiated, and statistics on the Canadian disability allowances program 1961-62 were prepared for the director of that program. Members of the division served on the Interdepartmental Committee on Building Standards for the Handicapped, and on the Interdepartmental Committee on Rehabilitation. The director visited Baltimore in April, 1962, to study the disability insurance component of the United States' old age, survivors' and disability insurance program.

### **Public Health**

Work continued on a new edition of "The Administration of Public Health in Canada", describing federal, provincial, local, and voluntary health services. Work was completed on analysis of the survey of health units in Quebec, and further analyses were done of the data from the health unit surveys in the other provinces. Reports were prepared on the legislative and executive functions in public health administration at federal, provincial, and local levels, and on provincial health legislation. An up-to-date collection of health legislation was provided to the World Health Organization, and a collection of health statistics for 1961 and 1962 was initiated for its use.

### **Child and Maternal Health**

Statistical analyses were continued on the Survey of Maternal and Newborn Care in Canadian Hospitals, and work was completed on the study of the incidence of scurvy in Canada for presentation to a meeting of the Canadian Paedia-



tric Society. Assistance was given in development and analysis of a study in Ottawa of women receiving thalidomide and the outcome of their pregnancies, and of a provincial reporting system on the incidence of congenital anomalies associated with thalidomide. The director served on the Expert Committee on the Occurrence of Congenital Anomalies.

### **Radiation Protection**

A report for the Film Monitoring Service 1958 to 1960 was prepared as a Radiation Protection Division bulletin, incorporating an analysis of the amount of accumulated radiation exposure. A series of experimental studies was designed to test the new automatic processing system for film monitoring and an analysis of variance on the factors in the variation in film standards was carried out.

Assistance was given in developing human bone sampling techniques for Strontium 90 content. A report was published on the genetically significant dose from diagnostic radiology in hospitals, and an analysis was completed of average thyroid mass values for the Canadian population by age and sex, based on reports submitted by Canadian hospitals. Advice was given on the proposed survey of milk consumption habits in Canadian children.

### **Other Health Research**

Assistance was provided to the Laboratory of Hygiene in planning a survey of normal haemoglobin levels in Canada as determined by standardized cyanmethaemoglobin techniques. The division will tabulate and analyze the data. At the request of the Medical Rehabilitation Consultant, assistance was given the Canadian Ophthalmological Society in planning a national collaborative glaucoma study. A statistical report on a dental health study of natural fluoridation at Ingersoll was completed for the Dental Health Division, and analysis was initiated of a two-year follow-up study of the topical application of stannous fluoride to the teeth of Ottawa school children. Assistance was provided to the Occupational Health Division for an evaluation of occupational nursing functions as surveyed by the University of Toronto, School of Hygiene. A completed analysis of variance on the dustfall measurements for a latin square testing of five dustfall gauges was submitted to the Occupational Health Division for a meeting of the Air Pollution Control Association in Detroit.

For the study of smoking habits and health among DVA pensioners, work was completed on preparing the data on World War II pensioners for tabulation; and the final report is anticipated during 1963. At the request of the Advisory Committee on Smoking and Health to the United States Surgeon-General, arrangements were made to process tabulations from this study for inclusion in a report of the United States Public Health Service. Further assistance was given the Epidemiology Division in developing background data on diseases such as smallpox, venereal disease and infectious hepatitis, and on the study of abnormal electrocardiograms.

The annual statistical report for the poison control program for 1960 was completed for the Food and Drug Directorate, and a statistical summary and



evaluation of the program (1958 to 1960) was prepared. Work on the 1961 report was also well advanced.

### **Income Security**

The program of old age, survivors and disability benefits announced in the Speech from the Throne, September 1962, required participation of staff members for a number of months beforehand in discussions to plan the new program. A number of memoranda were prepared and several meetings of the Interdepartmental Committee on Social Security were attended. The income security section supervisor spent two weeks in Britain reviewing policy, practice and problems related to the contracting out procedures adopted there and prepared detailed memoranda on the British experience and on changes in British national insurance legislation for use of members of the interdepartmental committee.

Detailed analyses of the two Ontario portable private pensions bills and their implications were prepared for the use of federal officials. Assistance was given the Dominion Bureau of Statistics in reviewing a draft version of its report on the 1960 survey of private pension plans.

Memoranda were prepared on costs of extending family allowances to older children, and on the implications for Canada of the New Zealand practice of allowing capitalization of family allowances for purchasing houses. Information was provided to the International Social Security Association regarding social services available to recipients of income maintenance and medical care benefits provided by the department. The question of reciprocal international agreements on income security arrangements was given careful study. Material was provided to the United States Department of Health, Education, and Welfare for an article in the Social Security Bulletin on the first ten years of the old age security program in Canada. Detailed comments were prepared upon request on a draft article on Canada's social security programs prepared by the Department of Social Services in Australia.

Members of the division served on the Interdepartmental Committee on Unemployment Assistance and provided economic and statistical data on general assistance.

### **Social Security Expenditures**

The division prepared, at the request of the Department of Labour, a number of tables on expenditures and notes for use in reply to a questionnaire of the International Labour Organization on the cost of social security in Canada from 1958 to 1960. Tables were prepared on social security expenditures in Canada, United States, United Kingdom, Australia and New Zealand for 1959 to 1961. Material on government expenditures on health in Canada for 1958 to 1961 was prepared for the World Health Organization. A new section on social security expenditures in Canada was prepared for the "Canada Year Book 1963".

In answer to a number of requests from federal, provincial and voluntary agency officials, a variety of tables on current social security expenditures was prepared. The director presented his annual lecture on health care economics and



social security expenditures to students of the University of Toronto, School of Hygiene.

## **Welfare**

New demands were made on the division for research services in connection with new departmental programs and developments in social work education. These entailed the provision of information, analyses and other memoranda for departmental use, and additional advisory services.

The division accepted responsibility for the annual report on enrolment and related matters for the National Committee of the Canadian Schools of Social Work. Preliminary data for 1962 were submitted to the schools and work begun on a new report form which would reflect recent developments affecting Canadian schools.

Work proceeded on family and child welfare, general assistance, delinquency, needs and services for the aged, and community organization and development. This included the preparation of special memoranda for departmental use and initial work on a series of bulletins.

The division continued to provide consultant services to other divisions and agencies. Research continued on unemployment assistance and a member of the staff served on a departmental committee on the administration of the program and supplied memoranda prepared for the purpose.

A large volume of information in the form of memoranda and publications was supplied to agencies, organizations, other departments and individuals in Canada and abroad. Requests for information and advice on programs for older people continue to be especially heavy as concern about their well-being is increasingly emphasized among community groups.

The regular biennial report was made to the United Nations on changes and developments in family, youth and child welfare in Canada and statements were prepared for United Nations agencies on a study of organization of social services and on proposed programs and demonstration projects then under consideration.

Staff members served on a number of committees, and represented the department at welfare conferences. Among these were the Interdepartmental Committee on the Older Worker, the Canadian Welfare Council's Committees on Aging, Homemaker Services, the Editorial Board of "*Bien-être social canadien*", the Advisory Board of Canadian Welfare, and the Quebec Regional Workshop on Family and Child Welfare. Conferences included the Canadian Conference on Social Work, the annual Conference on Aging of the University of Michigan, and the annual Program Conference of the National Council on Social Work Education.



## DIRECTORY OF DEPARTMENTAL OFFICERS

### MINISTER

Honourable Judy V. LaMARSH, P.C., M.P., B.A.

*Parliament Secretary*, S. Haidasz, B.Ph., L.Ph., M.D., M.P.

*Executive Assistant*, J. K. Macbeth

*Executive Secretary*, G. J. Blair

*Deputy Minister of National Health and Welfare (Health)*

G. D. W. Cameron, M.D., C.M., D.P.H., L.L.D., F.R.C.P.

*Deputy Minister of National Health and Welfare (Welfare)*

J. W. Willard, Ph.D., M.A., M.P.A., A.M.

### HEALTH BRANCH

#### FOOD AND DRUG DIRECTORATE:

*Director*, C. A. Morrell, M.A., Ph.D., F.R.S.C.

*Associate Director*, L. I. Pugsley, B.A., M.Sc., Ph.D.

*Assistant Director*, (Foods) R. A. Chapman, B.S.A., M.Sc., Ph.D.

*Assistant Director*, (Drugs) M. G. Allmark, B.A., M.A.

*Assistant Director*, (Inspection & Enforcement Services) A. Hollett, B.Sc., M.Sc.

*Chief, Narcotic Control Division*, R. C. Hammond, Phm.B.

#### *Regional Directors:*

Eastern Region (Halifax), L. B. MacIsaac, B.Sc.

East Central Region (Montreal), P. E. Jean, M.Sc.

Central Region (Toronto), H. E. Woodward, Ph.D.

West Central Region (Winnipeg), J. B. Jones, B.Sc.

Western Region (Vancouver), K. M. Render, B.Sc.

#### MEDICAL SERVICES DIRECTORATE:

*Director*, P. E. Moore, M.D., D.P.H.

*Associate Director (Medical)*, R. G. Ratz, M.D.

*Associate Director (Medical)*, H. A. Proctor, D.S.O., M.D., Ph.D.

*Associate Director (Administration)*, W. B. Brittain, D.F.C., B.Sc.

*Chief, Civil Aviation Medicine Division*, W. A. Prowse, M.D., D.M., D.P.H.

*Chief, Civil Service Health Division*, E. L. Davey, M.D., D.P.H.

*Chief, Northern Health Services*, G. C. Butler, M.B., B.Ch., D.P.H.

*Chief, Quarantine, Immigration Medical & Sick Mariners Services*, W. H. Frost, M.D., D.P.H.

#### *Regional Superintendents:*

Eastern Region (Ottawa), J. H. Wiebe, B.A., M.D., D.P.H.

Central Region (Winnipeg), O. J. Rath, M.D.

Saskatchewan Region (Regina), T. J. Orford, M.D., C.M.

Foothills Region (Edmonton), W. L. Falconer, M.D.

Pacific Region (Vancouver), W. S. Barclay, M.D.

**HEALTH SERVICES DIRECTORATE:**

*Director*, K. C. Charron, M.D., C.M.

*Assistant Director*, E. A. Watkinson, M.D., C.M., D.P.H.

*Principal Executive Officer*, J. H. Horowicz, L.L.D.

*Principal Medical Officers:*

Health Insurance, E. H. Lossing, M.D., D.P.H., C.M.

National Health Grants, G. W. Wride, M.D., D.P.H.

Research Development, L. B. Pett, B.S.A., M.A., Ph.D., M.D., D.P.H.

International Health, B.D.B. Layton, M.D., M.P.H.

Special Projects, J. B. Bundock, M.D.

**SPECIAL HEALTH SERVICES:**

Child and Maternal Health Division, *Chief*, Jean F. Webb, B.Sc., M.D., D.P.H.

Dental Health Division, *Chief*, H. K. Brown, D.D.S., D.D.P.H., L.L.D., F.A.C.D., F.I.C.D.

Emergency Health Services Division, *Chief*, A. C. Hardman, M.D.

Epidemiology Division, *Chief*, E. W. R. Best, M.D., D.P.H.

Hospital Design Division, *Chief*, H. G. Hughes, B.ARCH., A.R.I.B.A., M.R.A.I.C.

Laboratory of Hygiene, *Chief*, E. T. Bynoe, M.Sc., Ph.D.

Medical Rehabilitation, *Chief*, O. Hoffman, M.D.

Mental Health Division, *Chief*, Morgan Martin, M.D., C.M., M.Sc.

*Chief, Nursing Consultant*, Dorothy M. Percy, R.R.C., R.N.

Nutrition Division, *Chief*, J. E. Monagle, B.Sc., M.D.

Occupational Health Division, *Chief*, T. H. Patterson, M.D., D.P.H., M.P.H.

Public Health Engineering Division, *Chief*, W. R. Edmonds, M.A.Sc., B.P. Eng.

Radiation Protection Division, *Chief*, P. M. Bird, M.Sc., Ph.D.

**WELFARE BRANCH****FAMILY ALLOWANCES AND OLD AGE SECURITY DIVISION:**

*Director*, J. Albert Blais

*Assistant Director*, R. H. Parkinson, B.A., M.S.W.

*Regional Directors:*

Newfoundland, St. John's, L. C. Abbott

Prince Edward Island, Charlottetown, J. E. Green, B.Sc., M.S.W.

Nova Scotia, Halifax, M. T. Blue

New Brunswick, Fredericton, A. Nicholson

Quebec, Quebec, J. M. Lafrance, B.S.A.

Ontario, Toronto, W. F. Hendershot, B.A.

Manitoba, Winnipeg, W. H. Davis, D.P.A.

Saskatchewan, Regina, R. J. G. Mitchell, B.A., B.S.W., M.S.W.

Alberta, Edmonton, W. W. Dahl

British Columbia, Victoria, W. R. Bone

**OLD AGE ASSISTANCE DIVISION:**

*Director*, J. W. MacFarlane

**UNEMPLOYMENT ASSISTANCE DIVISION:**

*Director*, R. B. Splane, M.A., D.S.W.

*Assistant Director*, R. Rouleau

**NATIONAL WELFARE GRANTS:**

*Director*, W. W. Struthers, B.A., B.S.W.



**INTERNATIONAL WELFARE DIVISION:**

*Director, J. A. Macdonald, B.A.*

**EMERGENCY WELFARE SERVICES:**

*Director, P. H. Stehelin, L.L.B.*

**CIVIL DEFENCE COLLEGE, Annprior:**

*Commandant, Col. C. L. Smith*

**FITNESS AND AMATEUR SPORT DIRECTORATE:**

*Director, G. A. Wright, B.S.A.*

*Assistant Director, Doris W. Plewes, M.A., B.Paed, Ed.D.*

*Assistant Director, R. Dion, B.A., M.A.*

**ADMINISTRATION BRANCH****DEPARTMENTAL LIBRARIAN:**

*Mary D. Morton, B.H.Sc., B.L.S.*

**DEPARTMENTAL SECRETARY:**

*Olive J. Waters*

**INFORMATION SERVICES:**

*Director, Harvey W. Adams*

**LEGAL SERVICES:**

*Legal Advisor, R. E. Curran, Q.C., B.A., L.L.B.*

**PERSONNEL SERVICES:**

*Director, E. J. Preston, M.A.*

**PURCHASING and SUPPLY DIVISION:**

*Director, J. K. Wilson*

**RESEARCH and STATISTICS DIVISION:**

*Director, J. E. E. Osborne, M.A., D.H.A.*

**TRANSLATION:**

*Chief, G. A. Sauve*

**TREASURY OFFICE:**

*Chief, H. L. Rock*

**DIRECTORY OF DEPARTMENTAL ESTABLISHMENTS****ADMINISTRATIVE OFFICES****OTTAWA**

Jackson Building, Bank Street  
 Birks Building, Sparks Street  
 Booth Building, Sparks Street  
 Garland Building, Queen Street  
 Blackburn Building, Sparks Street  
 Daly Building, Mackenzie Avenue  
 Copeland Building, Albert Street

During 1964 it is expected that most of the Administrative Offices will be relocated in the new Departmental Headquarters Building at Tunney's Park.

**CIVIL DEFENCE COLLEGE**

ARNPRIOR, ONTARIO — P.O. BOX 250

**FAMILY ALLOWANCES AND OLD AGE SECURITY**

ST. JOHN'S, NFLD. ....	P.O. Box 2077
CHARLOTTETOWN, P.E.I. ....	P.O. Box 1238, Confederation Bldg.
HALIFAX, N.S. ....	Hollis St., Ralston Bldg.
FREDERICTON, N.B. ....	New Federal Building
QUEBEC, P.Q. ....	P.O. Box 1816, 51 Boulevard des Capucins
TORONTO, ONT. ....	25 St. Clair Ave., East, Toronto 7
WINNIPEG, MAN. ....	344 Edmonton St., Ellice Bldg.
REGINA, SASK. ....	Corner Scarth & Victoria Ave., Federal Bldg.
CALGARY, ALTA. ....	Room 209, Custom Building
EDMONTON, ALTA. ....	Room 541, Federal Building
KAMLOOPS, B.C. ....	345 Victoria Street
VANCOUVER, B.C. ....	325 Granville St., Federal Bldg.
VICTORIA, B.C. ....	Room 408, 805 Government St., Belmont Building
MONTREAL, P.Q. ....	Room 310, Postal Station H, 1254 Bishop St.



**FOOD AND DRUG LABORATORIES**

OTTAWA, ONT. ....	Tunney's Park
HALIFAX, N.S. ....	P.O. Box 605, Ralston Building, 105 Hollis St.
MONTREAL, P.Q. ....	Room 800, 400 Youville Square
TORONTO, ONT. ....	55 St. Clair Ave. East
WINNIPEG, MAN. ....	Room 310, Federal Bldg., Main and Water Streets
VANCOUVER, B.C. ....	Room 504, 325 Granville Street

**FOOD AND DRUG OFFICES**

OTTAWA, ONT. ....	Tunney's Park
HALIFAX, N.S. ....	P.O. Box 605, Ralston Bldg., 105 Hollis Street
CHARLOTTETOWN, P.E.I. ....	P.O. Box 1311, Dominion Bldg.
SAINT JOHN, N.B. ....	P.O. Box 396, 250 Prince William St.
SYDNEY, N.S. ....	P.O. Box 324, Federal Bldg.
ST. JOHN'S, NFLD. ....	P.O. Box 5115, Sir Humphrey Gilbert Bldg.
QUEBEC, P.Q. ....	Gare Maritime Champlain, Room 398, Anse au Foulon
THREE RIVERS, P.Q. ....	P.O. Box 1146, Post Office Bldg.
SHERBROOKE, P.Q. ....	P.O. Box 1120, 315 King St. W.
MONTREAL, P.Q. ....	Room 800, 400 Youville Square
TORONTO, ONT. ....	55 St. Clair Ave. East
BELLEVILLE, ONT. ....	P.O. Box 93, New Federal Bldg., Pinnacle St.
HAMILTON, ONT. ....	Room 530, National Revenue Bldg., 150 Main St. West at Caroline
KITCHENER, ONT. ....	P.O. Box 33, Dominion Building
LONDON, ONT. ....	P.O. Box 504, Room 602, Dominion Public Building, 457 Richmond
WINDSOR, ONT. ....	Dominion Public Building, 137 Ouellette Ave.
SUDBURY, ONT. ....	3rd Floor, New Federal Building
PORT ARTHUR, ONT. ....	Room 313, Public Building, 33 Court Street South
WINNIPEG, MAN. ....	Room 310, Federal Building
BRANDON, MAN. ....	P.O. Box 416, Room 227, Federal Building
SASKATOON, SASK. ....	307 London Building, 20th St. East & 3rd Avenue

REGINA, SASK. ....	Room 312, Motherwell Building
CALGARY, ALTA. ....	Room 209, Custom Building
EDMONTON, ALTA. ....	Room 541, Federal Building
KAMLOOPS, B.C. ....	345 Victoria Street
VANCOUVER, B.C. ....	325 Grandville St., Federal Bldg.
VICTORIA, B.C. ....	Room 408, Belmont Building, 805 Government Street

## IMMIGRATION MEDICAL SERVICES OFFICES

### Canada

ST. JOHN'S, NFLD. ....	Federal Building
GANDER, NFLD. ....	Gander Airport
STEPHENVILLE, NFLD. ....	Harmon Field Airport
SYDNEY, N.S. ....	Marine Hospital and Reserve Airport
HALIFAX, N.S. ....	(1) Pier 21, P.O. Box 129 (2) 619 Ralston Building
LANCASTER, N.B. ....	P.O. Box 140
MONCTON, N.B. ....	Moncton Airport
SAINT JOHN, N.B. ....	Immigration Building, Pier 9
QUEBEC, P.Q. ....	Champlain Harbour Station, Wolfe's Cove
MONTREAL, P.Q. ....	(1) 150 St. Paul Street, W. (2) 320 Baldwin Street
DORVAL, P.Q. ....	Montreal International Airport
OTTAWA, ONT. ....	Ottawa International Airport
TORONTO, ONT. ....	175 Bedford Road
MALTON, ONT. ....	Toronto International Airport
WINDSOR, ONT. ....	Windsor Airport
LONDON, ONT. ....	London Airport
FORT ERIE and NIAGARA FALLS, ONT. ....	P.O. Box 1001, Fort Erie
WINNIPEG, MAN. ....	Immigration Hall, 83 Maple St., and Winnipeg International Airport
EDMONTON, ALTA. ....	Edmonton Airport
VANCOUVER, B.C. ....	Immigration Building, foot of Burrard Street and Vancouver International Airport
VICTORIA, B.C. ....	816 Government Street

### Overseas

LONDON, England ....	38 Grosvenor St., London W.1
BELFAST, Northern Ireland ....	22 North Street
BRISTOL, England ....	5-18 Wine Street
GLASGOW, Scotland ....	18 Woodlands Terrace, C.3
LEEDS, England ....	5-7 New York Road



LIVERPOOL, England .....	17 Harrington St., Liverpool 2
BRUSSELS, Belgium .....	230 rue Royale
PARIS, France .....	38 Avenue de l'Opera
ROME, Italy .....	Via Acherusio Sud 9
THE HAGUE, Holland .....	12 Carel Van Bylandtlaan
COPENHAGEN, Denmark .....	Canadian Embassy, Vestagervej 5
BERLIN, Germany .....	Berlin-Charlottenburg, 2, Uhlandstr. 20-25 Ausgang II
COLOGNE, Germany .....	Canadian Embassy, Visa Section, Buchheimerstrasse 64-66, Weiner Platz, Cologne-Meulheim
LISBON, Portugal .....	Canadian Embassy, Avenida da Republica 44-20
MUNICH, Germany .....	Josefshospitalstrasse 7/4, Muenchen 2
STUTTGART, Germany .....	Marquardt Gebaeude, Koenigstrasse 20
HAMBURG, Germany .....	Canadian Consulate, General Visa Office, Schillerstr. 47/49, Hamburg-Altona
BERNE, Switzerland .....	Canadian Embassy, Medical Section, 43 Neuengasse, Interhaus, 2nd Floor
VIENNA, Austria .....	Canadian Embassy, Medical Section, Tuchlauben 8, Vienna 1
ATHENS, Greece .....	Canadian Embassy, Visa Office, 54A Queen Sofia Street
HELSINKI, Finland .....	Canadian Embassy, Visa Office, Bulevardi 10A
HONG KONG, China .....	3rd Floor, United Chinese Bank Bldg., 31-37 Des Voeux Road, Central, Box 183

### **SICK MARINERS CLINICS AND HOSPITALS**

HALIFAX, N.S. ....	Immigration Building, Pier 21
SYDNEY, N.S. ....	Marine Hospital
SAINT JOHN, N.B. ....	Immigration Building, Pier 9
QUEBEC, P.Q. ....	Champlain Harbour Station, Wolfe's Cove
MONTREAL, P.Q. ....	150 St. Paul Street West
VANCOUVER, B.C. ....	Immigration Building, foot of Burrard Street
VICTORIA, B.C. ....	816 Government Street

### **QUARANTINE STATIONS AND SUB-STATIONS**

GANDER, NFLD. ....	Gander Airport
ST. JOHN'S, NFLD. ....	Federal Building

SYDNEY, N.S. ....	Marine Hospital and Airport
HALIFAX, N.S. ....	Pier 21 & International Airport
LANCASTER, N.B. ....	P.O. Box 140
SAINT JOHN, N.B. ....	Pier 9
QUEBEC, P.Q. ....	Champlain Harbour Station, Wolfe's Cove
MONTREAL, P.Q. ....	150 St. Paul Street West and 320 Baldwin Street
BAIE COMEAU, P.Q. ....	Sub-Station
SEVEN ISLANDS, P.Q. ....	Sub-Station
RIMOUSKI, P.Q. ....	Sub-Station
PORT ALFRED, P.Q. ....	Sub-Station
THREE RIVERS, P.Q. ....	Sub-Station
SOREL, P.Q. ....	Sub-Station
PORT CARTIER, P.Q. ....	Sub-Station
DORVAL, P.Q. ....	Montreal International Airport
VICTORIA, B.C. ....	816 Government Street
VANCOUVER, B.C. ....	Immigration Building and Vancouver International Airport

### REGIONAL OFFICES — MEDICAL SERVICES

Responsible for Indian Health Services; Northern Health Service; Quarantine, Immigration, Sick Mariners; Civil Service Health and Civil Aviation Medicine.

EASTERN .....	Room 1128, Trade and Commerce Building, Wellington and Lyon Streets, Ottawa
CENTRAL .....	705 Commercial Building, 169 Pioneer Ave., Winnipeg
SASKATCHEWAN .....	735 Motherwell Building, Regina
FOOTHILLS .....	11344, 128th St., Edmonton
PACIFIC .....	4824 Fraser Street, Vancouver

### LABORATORY OF HYGIENE

OTTAWA, ONT. ....	Tunney's Park
-------------------	---------------

### OCCUPATIONAL HEALTH LABORATORIES

OTTAWA, ONT. ....	45 Spencer Street
-------------------	-------------------

### PUBLIC HEALTH ENGINEERING DISTRICT OFFICES

TRURO, N.S. ....	P.O. Box 608, Federal Building
MONCTON, N.B. ....	P.O. Box 86



MONTREAL, P.Q. ....	150 St. Paul Street, West
ST. CATHARINES, ONT. ....	Dominion Building
PORT ARTHUR, ONT. ....	Room 311, Post Office Bldg.
ST. BONIFACE, MAN. ....	Post Office Building
WINNIPEG, MAN. ....	2nd Floor, Postal Station B, Magnus Ave. at Main St.
REGINA, SASK. ....	Victoria Ave., Motherwell Building
EDMONTON, ALTA. ....	Room 541, Federal Public Bldg.
VANCOUVER, B.C. ....	Room 509, Federal Building

### EMERGENCY WELFARE DISTRICT OFFICES

VICTORIA, B.C. ....	Room 241, 816 Government Street
EDMONTON, ALTA. ....	Room 372, Federal Building
QUEBEC, P.Q. ....	Room 10, 3 Buade Street, P.O. Box 940
HALIFAX, N.S. ....	137 Main Avenue

### RADIATION PROTECTION

OTTAWA, ONT. ....	305 Vimy Building
-------------------	-------------------

### CIVIL SERVICE HEALTH CENTRE

OTTAWA, ONT. ....	No. 3 Temporary Building
-------------------	--------------------------











# DEPARTMENT OF NATIONAL HEALTH AND WELFARE

